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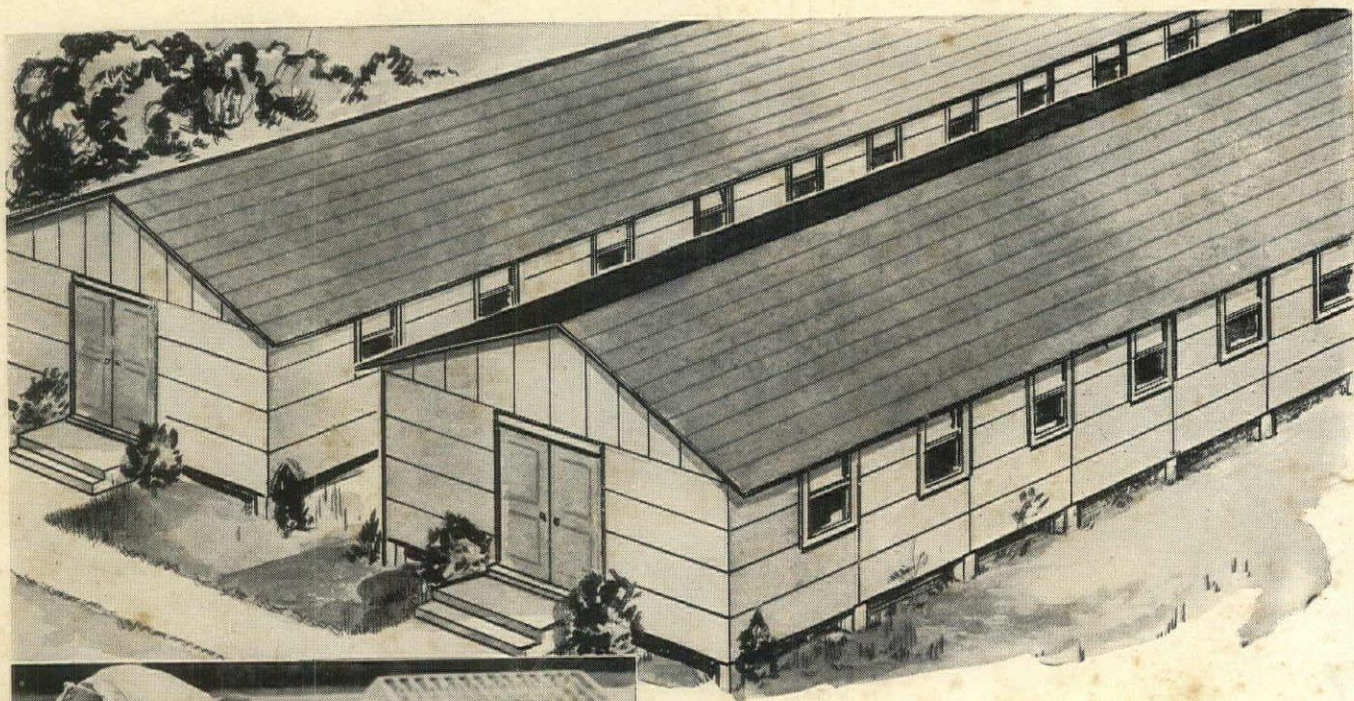
THE ARCHITECTURAL FORUM

NOVEMBER 1942



TWO NEW TRIPLE-PURPOSE PRODUCTS HELP SPEED CONSTRUCTION OF WAR HOUSING AND DORMITORIES

... Now Specified by the Government



Celo-Roof Units Go On Fast . . . Combine Roofing, Decking and Insulation

CELO-ROOF units are made from $\frac{3}{4}$ " cane board encased in 90 pound mineral surfaced roofing. Heavy butts form deep shadow lines. Interlocking wood nailing strip on under surface of each unit eliminates need for shingle lath or sheathing boards. Size: 7'11 15/16" long by 15 1/2" wide. Exposure 13 inches. Available in red, green, or black.

Celo-Siding and Celo-Roof Combine Strength, Insulation, and Good Appearance!

CELO-SIDING is a granule-surfaced siding made from cane fibre board, coated on all sides with an asphalt compound, then extra-coated on the exterior surface. Crushed mineral granules are then firmly pressed into this exterior surface to form a beautiful, permanent finish in brown, buff, red, or green.

Celo-Siding is $\frac{7}{8}$ " thick and 2'x8' or 4'x8' in size. 2'x8' size has T&G joints on long edges. 4'x8' size has square edges all around. Each suitable for horizontal or vertical application. All joints can be sealed with a caulking compound. *Thus one material serves for sheathing, siding, exterior finish, and insulation.*

Write for Specification Details and Samples on Both These New Products!

CELOTEX
REG. U. S. PAT. OFF.
BUILDING PRODUCTS

The word Celotex is a brand name identifying a group of products marketed by The Celotex Corporation.

THE CELOTEX CORPORATION • CHICAGO



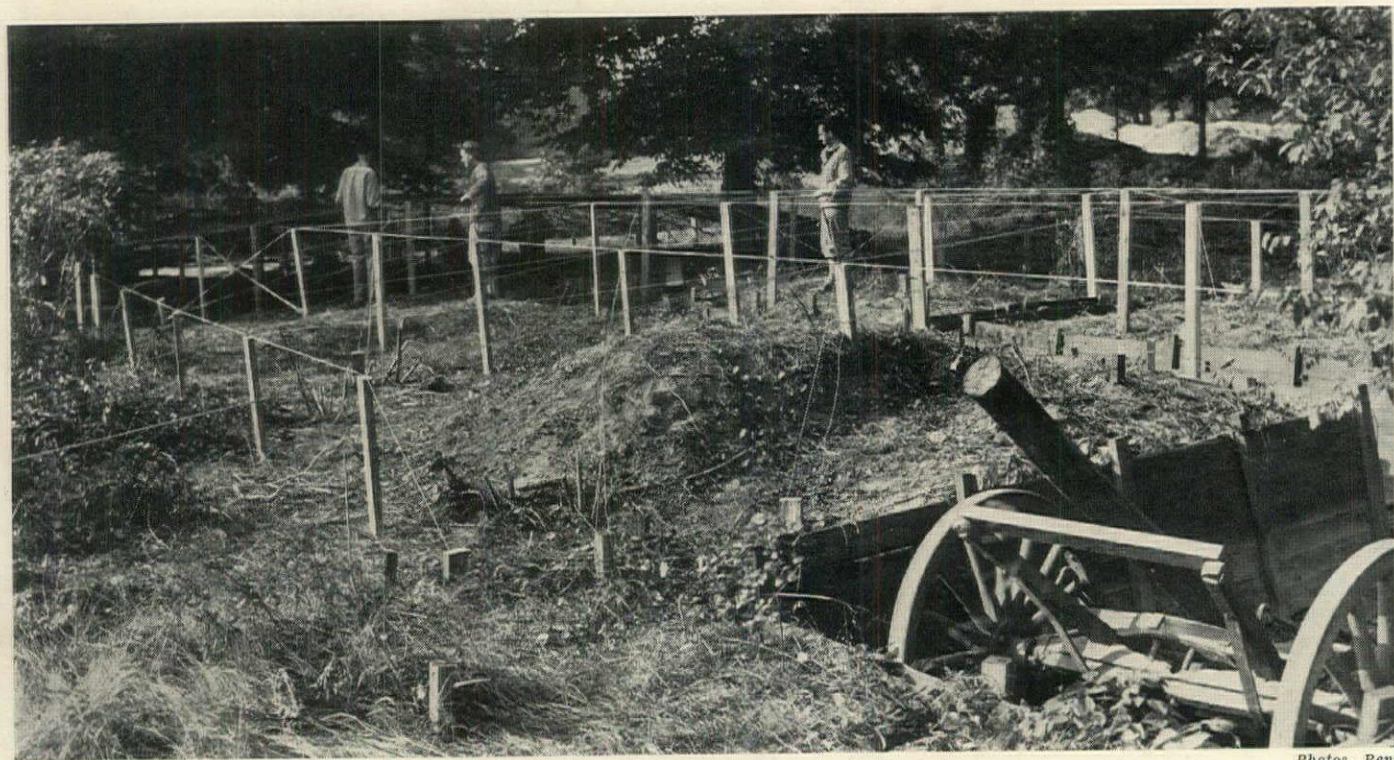
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In Military Service:
 Robert W. Chastaney, Jr.
 Robert Hanford
 Joseph C. Hazen, Jr.
 George B. Hotchkiss, Jr.
 S. Chapin Lawson
 A. Banks Wanamaker

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FORUM OF EVENTS



Photos. Renti

FORT BELVOIR: CAMOUFLAGE HEADQUARTERS

Geographically speaking, Fort Belvoir is the successor to Fort Humphreys, a military reception center of the last war; otherwise it bears no more relation to its predecessor than do the weapons, tactics and problems of World Wars II and I. Today Fort Belvoir is an exceedingly busy enterprise, run by the Corps of Engineers. Its population runs into the thousands. Prominent among the activities at Belvoir is camouflage, which includes a continuous program of experimentation with materials and techniques, under the direction of the Engineer Board, and instruction. It is the work of the school in training officers in camouflage which is illustrated here. The camouflage course is open to Army officers selected for this specialized training for service with camouflage troops or for camouflage staff duty with larger military organizations. These officers receive practical training at Belvoir so that they in turn may function as camouflage instructors and technical specialists. Until a few months ago, professionals in civilian life were selected by the War Department and permitted to take instruction at Fort Belvoir; now the only students are in uniform.

The course lasts two weeks and is necessarily broad in its scope. Students work from textbooks and in the field, learning the elements of dummy construction, aerial photography and map reading, paint application, the theory and use of nets, and the practice of concealing troops and equipment in the field.

The photographs on these pages, taken for THE FORUM with the collaboration of the Engineer School, show students at work in the classroom and out of doors. Illustrated above is a common problem: camouflage for a gun position. Nets, similar to those shown at the lower right, will cover the wires stretched on stakes. The dummy gun, turned out in one of the Belvoir shops, is used merely to indicate the size and approximate shape of a real field piece. No purpose would be served, obviously, by the use of actual equipment for such exercises.



CAMOUFLAGE INSTRUCTION FROM MODELS



STUDENTS GARNISHING NETS

A CHANCE FOR CREATIVE THINKING



"THE STORE FRONT OF TOMORROW"

THE NEW PENCIL POINTS—KAWNEER ARCHITECTURAL COMPETITION gives you the opportunity of exercising your creative ability at a time when war conditions have curtailed much of the normal demand for design work.

William Lescaze is Professional Advisor. Judges include Frederick Bigger, F. A. I. A., Washington, D. C.—Morris Ketchum, Jr., A. I. A., New York City—Samuel E. Lunden, A. I. A., Los Angeles, Cal.—Mies Van der Rohe, Chicago, Ill.—Roland Wank, A. I. A., Knoxville, Tenn.

Competition closes January 4, 1943,—write now for Program. Address The New Pencil Points, 330 W. 42nd Street, New York, N. Y.

PRIZES

FIRST PRIZE	\$1,000.00
SECOND PRIZE	500.00
THIRD PRIZE	250.00
5 HONORABLE MENTIONS	
\$100.00	500.00
	\$2,250.00



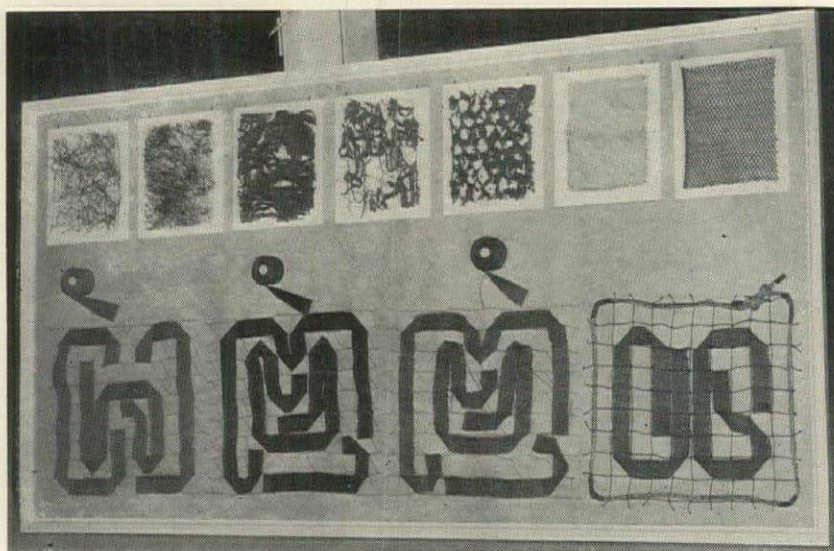
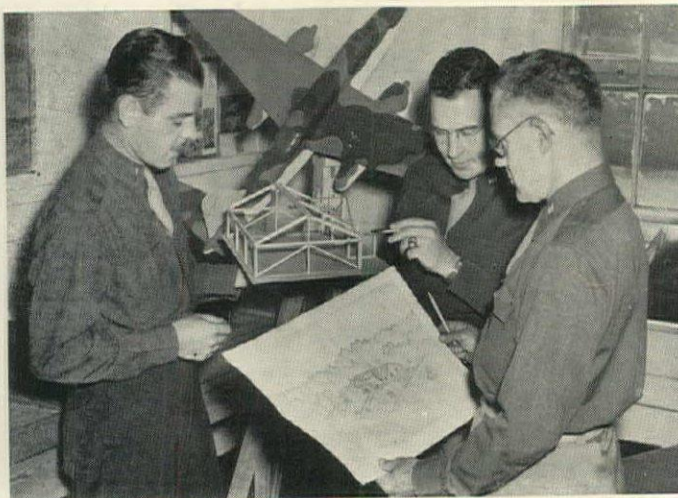
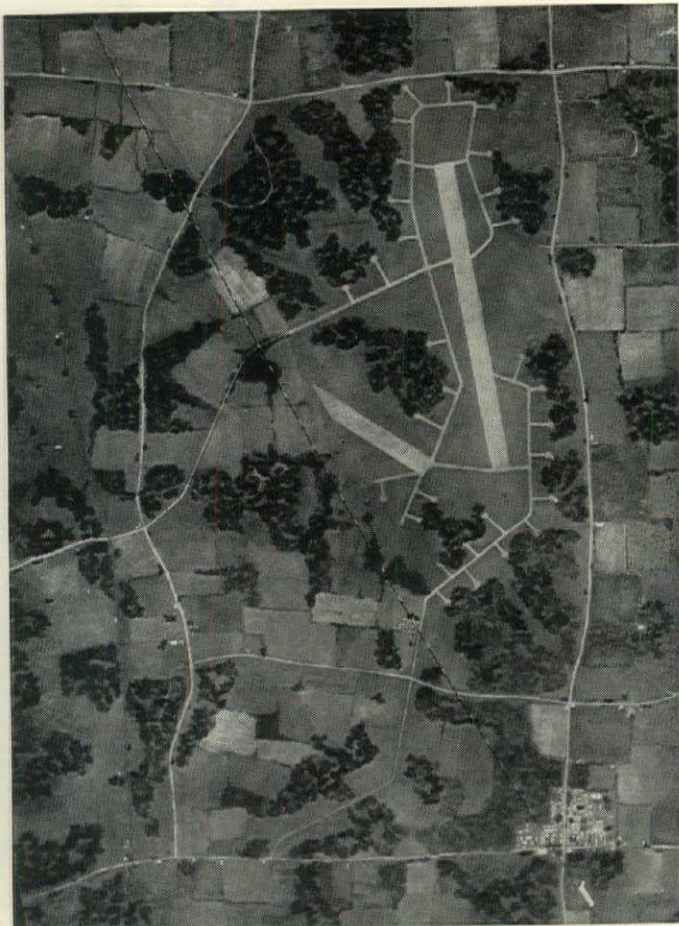
Kawneer

RUSTLESS METAL STORE FRONTS • DOORS • WINDOWS
THE KAWNEER COMPANY • NILES, MICHIGAN

FORUM OF EVENTS

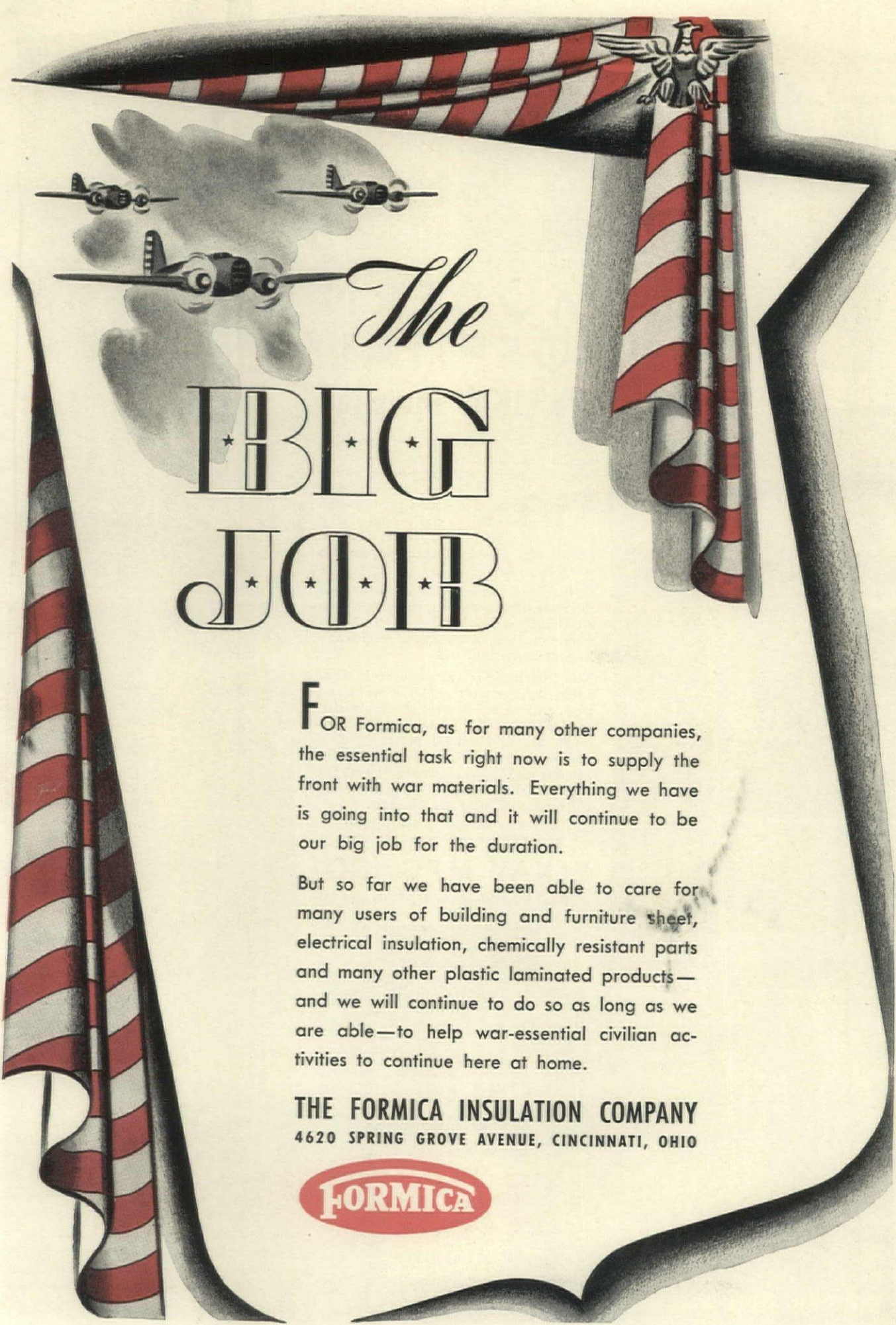
FORT BELVOIR, continued

Nets offer one of the most valuable and workable methods of camouflage, as they break up shapes and shadows. Typical of the many ways in which they are used is the illustration below, with three tiers to create the impression of a continuation of the trees which are in actuality separated by the road. The photograph at the right is a model of an airfield, half of which has been camouflaged.



The civilian shown is not a student, but an employe in the Engineer Board's model shop. Civilian workers, especially draftsmen and model builders, are selected by the Army, then recommended to the Civil Service, which does the hiring. The students and instructor above are examining the sketch and model of a dummy house which will conceal an anti-aircraft gun. Such dummies are frequently built full-size on the grounds by the students.

The large panel on the left is a demonstration of the many methods and materials used in garnishing nets. These include steel wool, paper, burlap, chicken feathers or glass wool on chicken wire, and similar materials on nets. The nets themselves are obtained in a great variety of color and mesh.



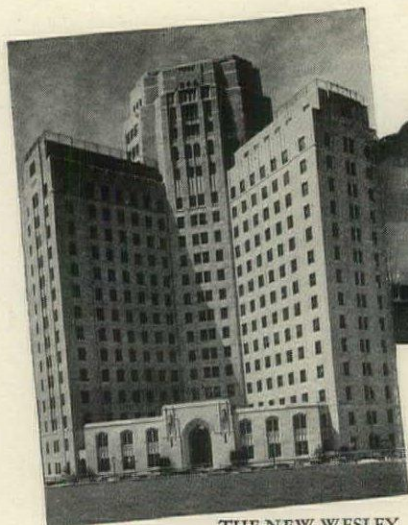
The BIG JOB

FOR Formica, as for many other companies, the essential task right now is to supply the front with war materials. Everything we have is going into that and it will continue to be our big job for the duration.

But so far we have been able to care for many users of building and furniture sheet, electrical insulation, chemically resistant parts and many other plastic laminated products—and we will continue to do so as long as we are able—to help war-essential civilian activities to continue here at home.

THE FORMICA INSULATION COMPANY
4620 SPRING GROVE AVENUE, CINCINNATI, OHIO





THE NEW WESLEY
MEMORIAL HOSPITAL



NATIONAL NAVAL MEDICAL CENTER



THE MEDICAL AND
DENTAL BUILDING

MODERN HOSPITALS

are **ELKAY** Equipped

In order to render the best possible service and safeguard the health and welfare of its patients, the equipment in the modern hospital is specially designed to meet the technical and professional requirements of its staff. That's why in so many modern hospitals ELKAY "Sturdibilt" Stainless Steel equipment is so widely used.

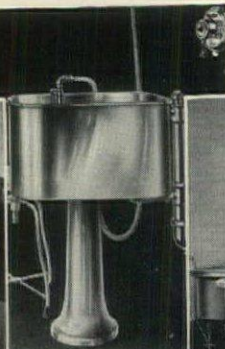
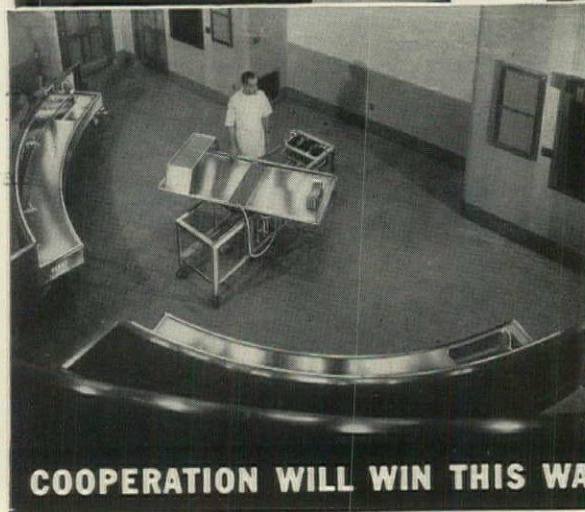
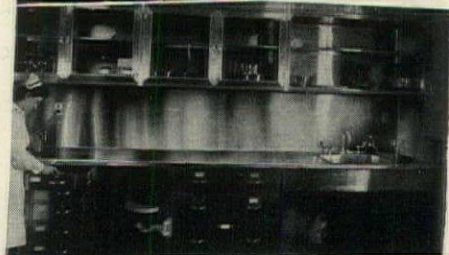
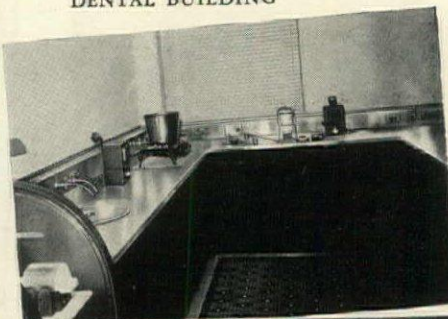
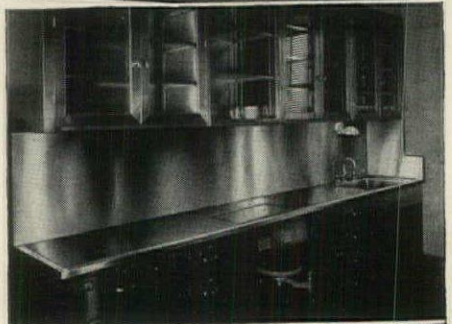
Its stain-and-acid resisting surface assures the utmost in sanitation while its sturdy, electrically welded and reinforced construction assures a lifetime of service and low maintenance cost.

The installations shown here include hydro-therapy tanks, cabinet sinks and tops, an arm bath, an autopsy table, also service room and other laboratory equipment in the National Naval Medical Center, Bethesda, Md.; the new Wesley Memorial Hospital, Chicago; and the Medical and Dental Building of the University of Illinois, Chicago.

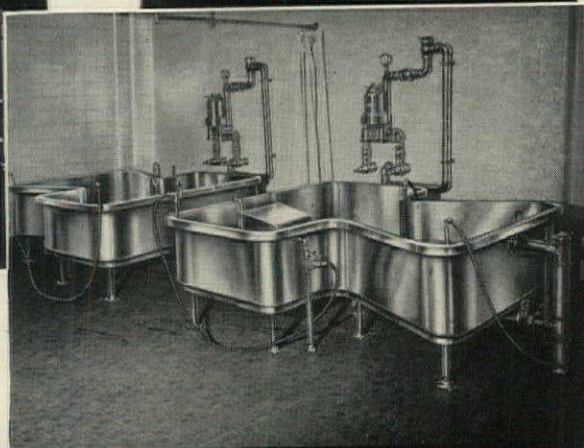
We invite your inquiries. Our engineers will gladly submit plans and estimates

ELKAY MFG. CO.

4703-14 Arthington St., Chicago, Ill.



INSTALLATIONS
IN THE
NATIONAL NAVAL
MEDICAL CENTER
ARE FROM U. S.
OFFICIAL
PHOTOGRAPHS



COOPERATION WILL WIN THIS WAR—Get Into the Fight With Your Scrap

You can be glad there's **NO SHORTAGE of "WAR PAINT"!**

FORTUNATELY for the building industry, there is at present no shortage of white lead. Not only is there enough available for all civilian as well as military needs—but its uniformly high quality remains unchanged.

This means you can go right on specifying *pure white lead paint*, to give long-lasting protection and beauty at no premium in cost.

White lead paint is the "war paint" to use. In addition to its great durability, it has an "elastic" quality which prevents cracking and



PROTECTED FOR MORE THAN 100 YEARS—WITH WHITE LEAD PAINT—"The Pillars," New Lebanon Center, New York. The excellent preservation of this gracious wayside tavern—due largely to the protection of white lead paint—belies its more than a century of active service.

scaling. And it saves material and maintenance costs by spreading them over extra years of service. Yet white lead paint costs no more than regular quality paints.

From every angle—beauty, protection and economy—white lead paint proves that "the best is cheapest."

LEAD INDUSTRIES ASSOCIATION
420 Lexington Avenue, New York, N. Y.

INFORMATION FOR THOSE WHO SPECIFY PAINT—Pure white lead is sold by paint stores in two different forms: (1) as a paste, commonly known as "lead in oil," for use by painters and decorators in mixing their pure white lead paint to order for each job; (2) as pure white lead paint in ready-to-use form, in popular-size containers. You are not confined just to white—white lead can be tinted to a wide range of colors.

White lead is also the backbone of other quality paints. In buying exterior paint it is a safe rule to follow: "the higher the lead content, the better the paint."

GET THIS FREE GUIDE to better painting. Send today for valuable booklet "WHAT TO EXPECT FROM WHITE LEAD PAINT" containing complete information about low-cost quality painting on all types of surfaces



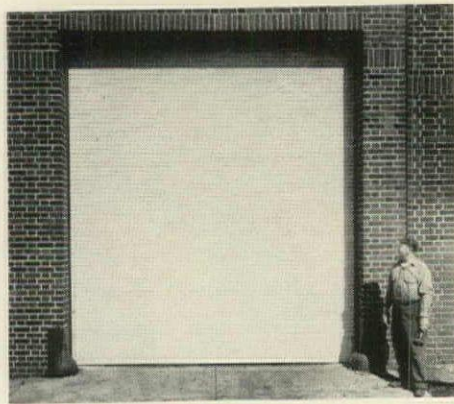
**You're money ahead
when you paint with**

White Lead

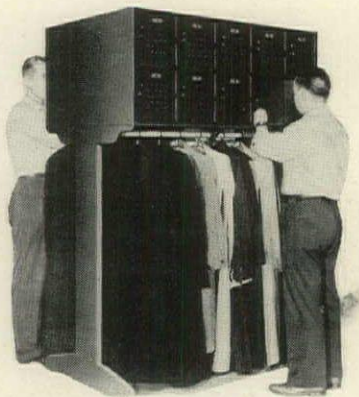
Building Reporter



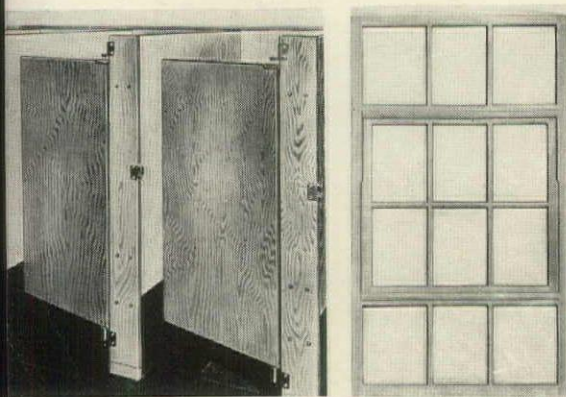
1. Wood Louvers for Doors and Shutters



2. Wood Slat Rolling Door Replaces Steel



3. Portable Wood Shoprobe, Private Lockers



4. Plywood Partitions 5. Wood Window

METAL SUBSTITUTES FOR INDUSTRIAL USE

Last month the following new products, designed to conserve metal in industrial plant applications, made building news. Next month Building Reporter will present a compilation of similar products for domestic use. For additional information on any product described in this section write directly to the manufacturer.

WOOD SHELVING, LOCKERS, WINDOWS, etc.

Name: Wheeler Osgood V-Vent Louvers (left 1).

Features: New V-shape replaces ordinary wood slat construction for increased strength and more permanence, greater control of air circulation, light and vision cut-off. Can be installed in doors or shutters. Furnished in 1½, 1¾ or 1⅞ in. thicknesses.

Manufacturer: Wheeler Osgood Sales Corp., Tacoma, Wash.

Name: Upward-Acting Wood Rolling Door.

Features: Curtain proper is composed of wood slats suitably shaped to permit easy articulation and jointed together by means of metal tapes or cables. It coils overhead upon a barrel, journaled in heavy, cast-iron brackets mounted at the corners of the opening above the lintel, and travels in heavily constructed wood guides placed at the side of the opening. Bearings are provided at the points where the curtain enters the guides. Helical springs enclosed in the barrel assure perfect counterbalancing. Operation can be manual, by chain and reduction gearing, or by motor. Permanently mounted on the face of the wall or between-jambs and built to order in any practical size.

Manufacturer: The Kinnear Mfg. Co., 820 Fields Ave., Columbus, Ohio.

Similar wood rolling doors are also being featured by these companies: Cornell Iron Works, Inc. (left 2), 36th Ave. and 13th St., Long Island City, N. Y. and The J. G. Wilson Corp, 370 Lexington Ave., New York, N. Y.

Name: Lyon Portable Wood Shoprobe (left 3).

Features: Provides full-length coat hanging space and a private locking compartment at a convenient height for each employee. Double-faced, 20-person unit requires 13½ sq. ft. of floor space; single-faced, 10-person unit requires 6½ sq. ft.

Finished inside and out in green enamel. Also available, a complete line of wood shelving, lockers and cabinets.

Manufacturer: Lyon Metal Products, Inc., Aurora, Ill.

Name: Prefab-Plywood Panel Toilet Partitions (left 4).

Features: Supplied complete with all fittings, finished (if desired) in gray or white enamel, these panels save time in installation. Made in two types: Type P is the flush style and uses metal only for the hardware; Type PS is the panel style with metal posts and headrail (with this type the plywood panels can be replaced with Ferrometal panels when again available).

Manufacturer: Milwaukee Stamping Co., 828-P South 72nd St., Milwaukee, Wis.

Name: Dura-War Windows (left 5).

Features: Frame, ventilator and muntin sections are of clear Ponderosa white pine, 1½ in. thick, preservative-treated with combination toxic and water repellant. Ventilators pivot approximately 2 in. above centerline. Designed for inside glazing. Types and sizes parallel standard line of horizontally pivoted steel windows.

Manufacturer: Truscon Steel Co., Youngstown, Ohio.

Name: Victory Wood Locker.

Features: Made of plywood panels dovetailed into Ponderosa Pine framework, each locker consists of side panels, back panel, front panel including door, bottom shelf, hat shelf, top, and divider partition. Shipped knocked down with all parts pre-fitted for quick, easy installation. Door is installed with three hinges; coat hook and padlock eyes are furnished loose. Painted two coats—olive green. Available as individual units or in batteries of any desired number. Size: width, 15 in.; depth, 18 in.; height, 65 in. with legs, 60 in. with legs removed.

Manufacturer: Curtis Companies, Inc., Clinton, Iowa.

NON-METALLIC REFLECTORS, SPECIAL CIRCUIT

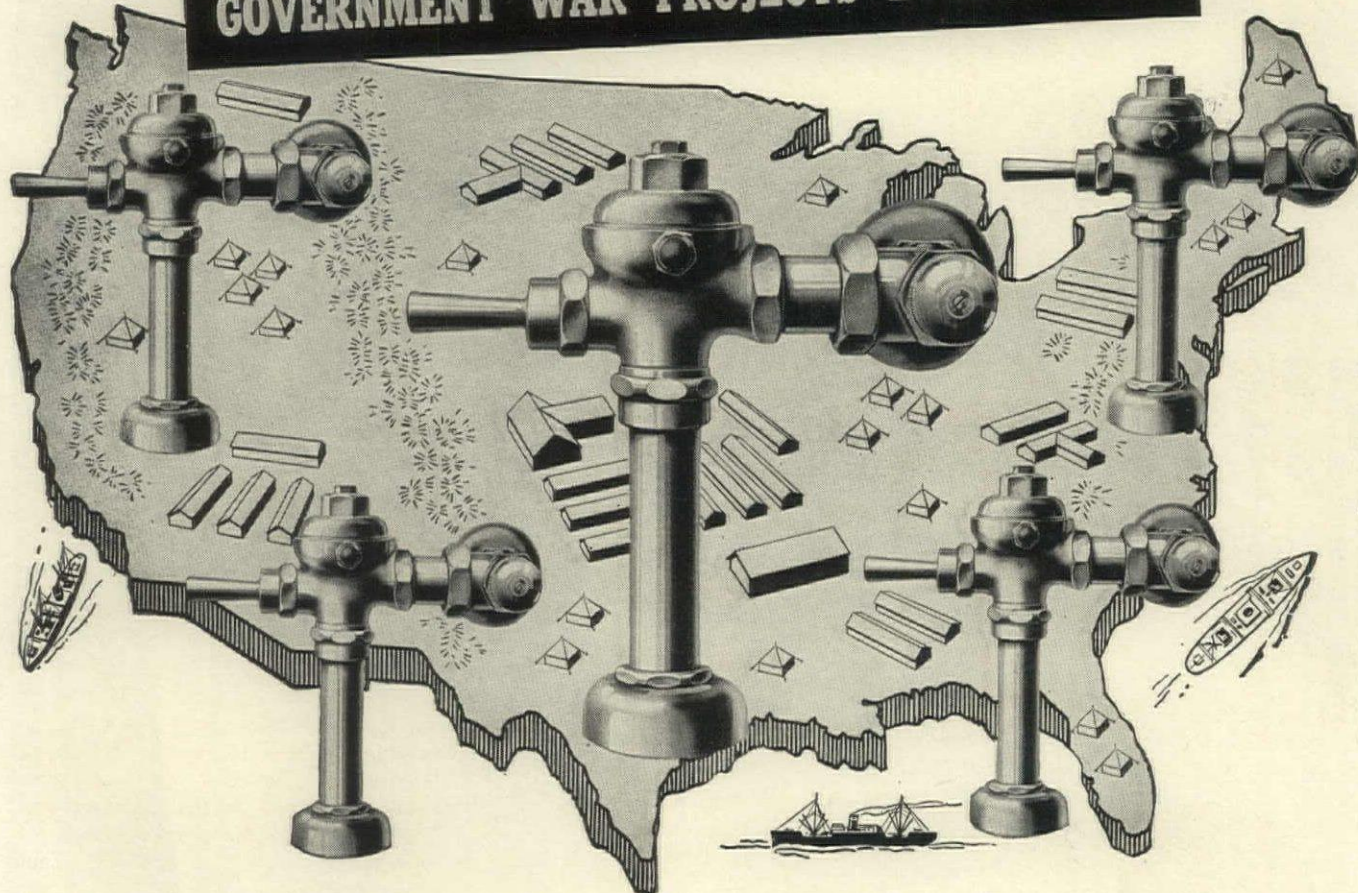
Name: Maze-Lite Industrial Luminaire.

Features: The lightweight reflector is formed of sturdy pressed wood which readily accepts Guth's 300° white finish. The accessory housing is of steel and features side-of-channel starter switches

(Continued on page 116)

DELANY FLUSH VALVES

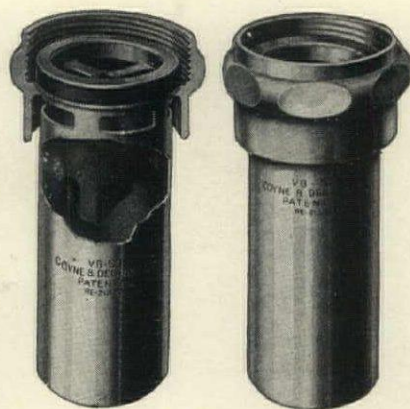
ARE IN USE IN ALL TYPES OF
GOVERNMENT WAR PROJECTS EVERYWHERE



A truly Remarkable Flush Valve and Vacuum Breaker. When you install a Delany Flush Valve you will not have to worry about servicing it — it's that good.

The few working parts are your insurance against future trouble. All parts are quickly replaceable.

When equipped with a #50 Delany Vacuum Breaker you have positive assurance against back syphonage. The simple design and action is 20 years ahead of any flush valve Vacuum Breaker on the market.



DELANY No. 50 VACUUM BREAKER

SINCE 1879
Coyne & Delany Co.
BROOKLYN N.Y.



*How did PT boats get that way?

In both armament and power PT boats pack a punch. Yet, built more like an airplane than a warship, these mighty featherweights of the fleet go forth unarmored...depend for protection on *speed!*

How did PT boats get that way? Ask builders of famous racing hydroplanes. Or men who make cars and planes. Many a secret they could divulge about the PT boat's powerful light-weight motors... smooth-molded plywood super-structure... and the complicated system of girders that strengthens her streamlined hull.

But no secret are the rustless "precision-straight" propeller shafts that transform her *Power* into *Speed*. America's fastest racers for years have driven through shafts of the tough, corrosion-resistant "sea-go-in' metal"... Monel!

Even stronger and stiffer than Monel, yet equally resistant to salt water corrosion is the newer alloy, "K" Monel. Developed for such peacetime applications

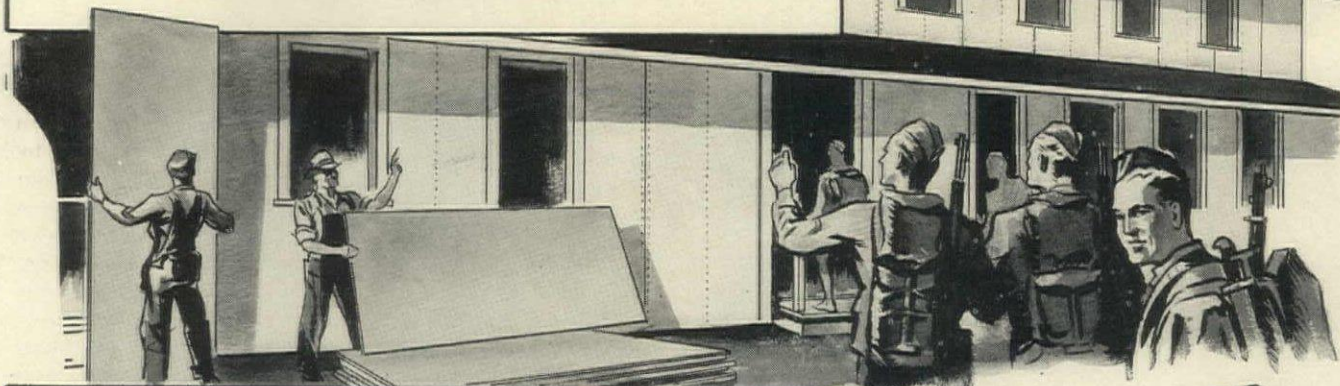
*This information published by permission of Navy Department.

as rotary pump shafts and other highly-stressed parts, and now used for shafts in PT boats, "K" Monel through heat treatment gains the strength and hardness of alloy steel...well able to take the terrific wrenching and strain of hairpin twists and turns at express speed. No shaft trouble for PT boats equipped with "K" Monel!

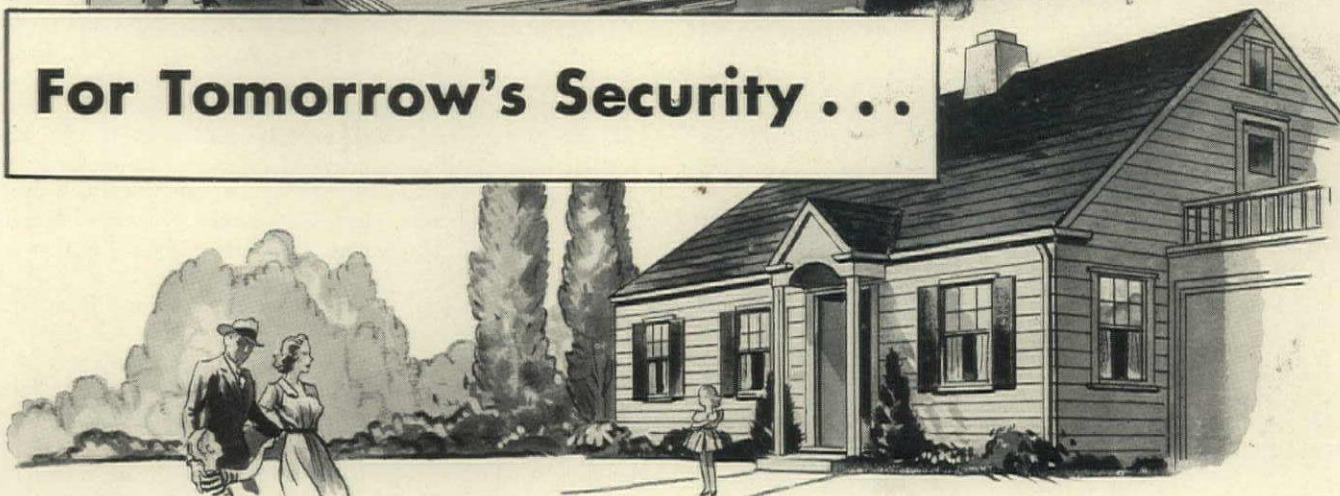
Because of this and similar achievements with other INCO Nickel Alloys, these metals are assigned to many important roles in our all-out war effort, and are no longer available for propeller shafts or other peacetime uses.

THE INTERNATIONAL NICKEL COMPANY, INC.
67 Wall Street
New York, N. Y.

For Today's Emergency!



For Tomorrow's Security . . .



INSULITE meets your need!

TODAY, even minutes count. The critical shortage of labor makes it imperative that all types of construction be accomplished in the shortest time possible.

In this emergency, Insulite meets the need. Contractors and builders know those buildings constructed with Insulite go up quickly, because the large, strong panels can be rapidly applied. For exterior walls, or for interior walls

and ceilings, Insulite saves time in application. And Insulite *insulates as it builds*—double value from one material.

All Insulite products represent the highest quality, and the use of Insulite in large government contracts is convincing proof that it meets every demand—quick application, adaptability to every kind of construction, a minimum of waste, plus outstanding durability.

Time is EVERYTHING Today!



SAVES TIME: See how the large panels of Insulite, covering a large section of a wall, are quickly applied and nailed into place.



MORE TIME SAVED: On interior walls, Insulite again saves time. Insulite interiors require no plaster, papering or painting.

INSULATE WITH

INSULITE

THE ORIGINAL WOOD FIBRE STRUCTURAL INSULATING BOARD

INSULITE
Minneapolis,
Minnesota



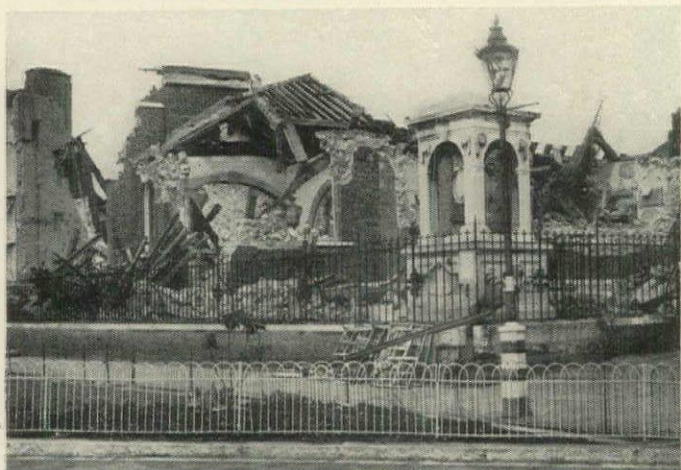
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BOOKS



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CHELSEA OLD CHURCH, LONDON



FORD'S HOSPITAL, COVENTRY

THE BOMBED BUILDINGS OF BRITAIN, edited by J. M. Richards. The Architectural Press, Ltd. 140 pp., illustrated. 8x11. 15s.

The Battle of Britain, the series of extremely destructive raids which occurred between August 1940 and May 1941, took a heavy toll of English architecture. In addition to world-famous monuments of the Wren and other periods, a great number of anonymous houses and squares of the 18th and 19th centuries were lost. It would be hard to say which loss was the greater, for many of the modest houses and streets marked one of the high points of urban architecture. The ruins shown in this book, which, incidentally, consists almost entirely of pictures and short captions, were selected by Mr. J. M. Richards, editor of *THE ARCHITECTURAL REVIEW*. His list includes most of the important buildings, but it is by no means complete. In addition to the section on London, which is naturally the most important, there are six sections covering Bristol, Coventry and the other towns which were bombed most heavily, and a section which includes damage in cities and towns which were attacked only sporadically. As in the exhibition now in this country (see page 65), most photographs of bombed buildings are accompanied by illustrations which show them as they once were.

Perhaps as interesting as the illustrative material is the three-page introduction, which sums up tersely one intelligent critic's point of view. Mr. Richards finds the spectacle of bomb-battered cities neither unique nor catastrophic: "Storm and lightning, the death-watch beetle, Cromwell's troopers, the speculative builder, mere obsolescence—and now German bombs; the legacy they leave of ruins, or living architecture reduced to memories and legends, is all one. . . ."

"The public mind, without necessarily deluding itself that air-raid destruction has of itself done much to bring improvement nearer, has universally identified the destruction of the congested centers of our cities with the possibilities of reconstruction. The destruction has been made to symbolise the spectacular end of an era that will not return. From this point of view the ruin, even when looked at as architecture in its own right, represents the apotheosis of the past—the intense experience of these active days crystallized into architectural shape. This is not the place to discuss the question of which damaged monuments should be restored and which demolished. Each case must be decided on its own merits, topographical, social and architectural. But when it is all over a few of the bomb-wrecked buildings might well be left as permanent ruins—not, one hastens to add, as object-lessons for future war-mongers or for any other moral purpose—but for the sake of the intensely evocative atmosphere they possess in common with all ruins, which gives them an architectural vitality of their own; and frankly for their beauty. To posterity they will as effectively represent the dissolution of our prewar civilisation as Fountains Abbey does the dissolution of the monasteries."

Comments on the buildings themselves are equally objective and dispassionate. There is no lamentation over "vandalism," no attempt to turn destroyed mediocrity into lost masterpieces. St. Mary's in Haggerston, for instance, "was a plain brick box with a rather elaborate Tudor front dominated by an absurdly thin tower." Such caustic appraisals, however, do not in any sense minimize the seriousness of the national loss, for the very frankness of the criticisms gives added weight to the comments on the really fine buildings damaged. Mr. Richards' purpose, to produce "an obituary notice and a pictorial record," has been admirably fulfilled.

(Continued on page 100)

LUMAPANE

is the most recent of the three
NON-SHATTERING PLASTIC GLAZING
materials developed by

**CELANESE
CELLULOID
CORPORATION**
The First Name in Plastics



LUMAPANE*

Primarily developed for the Armed Forces . . . meets the most severe conditions where great resistance to explosion is essential. Breakage is almost impossible—eliminates danger from flying splinters. Widely used in heavy industries (war production) factories. LUMAPANE provides fair degree of vision, and up to twice the insulation of double thick glass. Made in sheets 20" x 50", from which panes may be cut in desired sizes and shapes. Standard wire base is 16 mesh.

VIMLITE*

This pioneer World War I Plastic Glazing is now again extensively used in troop housements and pre-fabricated structures—it eliminates loss from breakage during transportation and erection. VIMLITE has high ultra-violet ray transmission—is generally used in health, plant culture and animal husbandry applications. Diffuses light rays. Obscures images from the outsider. Offers great economy when clear vision is not desired. Made in 24", 28" and 36" widths, in rolls 100 ft., 50 ft., and 25 ft. 14-mesh wire screen fabric base. May be cut with shears.



LUMARITH*

The super-tough, transparent Plastic Glazing. . . . LUMARITH gives military stamina to glider and 'plane cockpit enclosures, windshields and ports. Has great impact strength—non-shattering. Storm sash glazed with LUMARITH offers a crystal-clear closure with high ultra-violet ray transmission, high insulation. Ideal for plant and animal culture and human health applications. Made in sheets 20" x 50".

Plastic Glazing's ability to "take it" in military installations has aroused the particular interest of heavy industries. Plastic Glazing is easily installed in both wood and steel sash. Write for descriptive booklet on these three types.

*Reg. U. S. Pat. Off.

Celanese Celluloid Corporation, a division of Celanese Corporation of America, 180 Madison Avenue, New York City.
Dayton, Chicago, St. Louis, Detroit, San Francisco, Los Angeles, Washington, D. C., Leominster, Montreal, Toronto.

FOR ALL-OUT SPEED in Construction!

**PICTURE CENSORED
FOR THE DURATION**

FOUNDATIONS FOR 4½-TON LATHES READY IN 19 HOURS

• Foundations for 4½-ton lathes making 300- to 400-lb. bomb casings were needed quickly. The contractor reported that placement of Atlas High-Early concrete was completed at 12:00 noon. At 7:00 the next morning, the lathes were in place on the foundations and working.

Typical examples of "Full-Speed-Ahead" building with Atlas High-Early cement. Now is the time to put this easily available material to work.

WHAT is your speed problem in construction? A war emergency building? An addition to a munitions plant? A military road? An airport runway? A naval base? A cantonment?

You will find an answer in Atlas High-Early cement for any type of construction work. Its rule is "Speed" — in building, converting, or repairing — in summer or winter. On typical jobs it has saved from one week to more than two months. And, while speeding up schedules, it often saves money on forms, curing, and protection.

Read what happened on the jobs illustrated here. On your next "Rush" contract, use Atlas High-Early and see what it will do for you. In actual application it is similar to normal portland cement and just as easy to handle. Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York City.

OFFICES: New York, Chicago, Philadelphia, Boston, Albany, Pittsburgh, Cleveland, Minneapolis, Duluth, Kansas City, St. Louis, Des Moines, Birmingham, Waco.

TIME FOR COMPLETION CUT IN HALF



• The construction superintendent reported that Atlas High-Early, in addition to cutting time for completion approximately 50%, permitted earlier stripping of forms, saving 50% in form lumber costs.

NEW FLOOR READY IN 24 HOURS



SAVED 33% CONCRETING TIME



• In this 300-ft. x 600-ft. building, the contractor stated that Atlas High-Early cement cut concreting time 33% and saved 68% in rental cost of metal-pan forms.

• When munitions work called for a new 80-ft. x 300-ft. building, the company got it fast with Atlas High-Early cement. Twenty-four hours after concrete was placed the floor was in use.

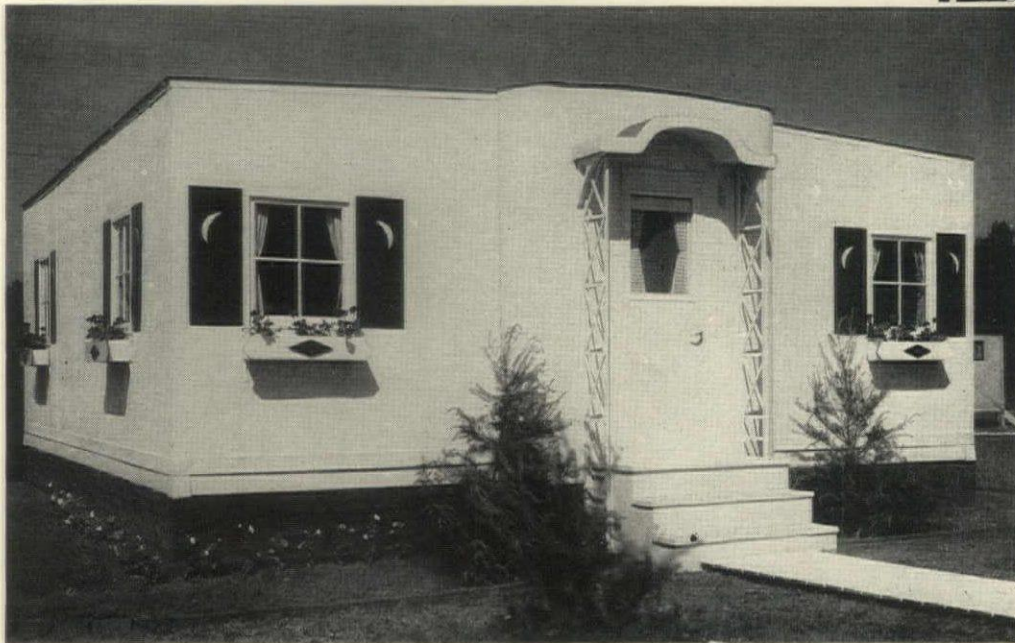
AP-H-43

ATLAS HIGH-EARLY CEMENT

A UNIVERSAL ATLAS PRODUCT



**A DWELLING
THAT CAN BE MOVED
TO A NEW LOCATION
AT A MOMENT'S NOTICE**



**Five Rooms
and Bath**

●
**Complete With
Plumbing, Heating
and
Electric Wiring**

**A NEW TYPE
OF HOUSE**

●
**A NEW IDEA
IN SPACE
UTILIZATION**

IMAGINE building a house completely within factory walls instead of erecting it, piece by piece, on a building site! Imagine equipping the house, right in the factory, with plumbing pipes and equipment, electric wiring and fixtures, and also with complete cooking and heating facilities! Then imagine being able to move such a house from the factory to any specified location on an ordinary flat-bed truck! No wonder the Palace Factory-Fabricated Home is acclaimed as marking a new epoch in the field of home building!

Revolutionary from the standpoint of applying mass production methods to house-building, the Palace Factory-Fabricated Home is equally revolutionary from the standpoint of space utilization. Here, in a home measuring 22½ ft. x 28 ft., are five rooms and bath—adequate in size for a family of six.

While government needs demand our entire present production, we suggest that you post yourself now on this new development in residential buildings which will, for the first time in history, make high-quality, low-cost homes available to the masses. Write for literature.



**Palace Travel Coach Corporation
Flint, Michigan**

TRAVEL COACH CORPORATION



WHAT DO GUN TURRETS AND "GARBAGE GRINDERS" HAVE IN COMMON?



NO MATTER what this sky warrior looks like, it's how it *functions* that counts! So in designing a modern bombing plane, the gun turrets and all other "operating equipment" rank equally important with the fuselage.

For the same reason, in tomorrow's homes, the "garbage disposall," and other "operating equipment," which in large measure determine how a house *functions*, will assume new importance.

Today, millions of American men and women—in the armed forces, on the production lines, on the home front—are learning that the right kind of operating equipment does the job easier, better, faster, and at less cost. In their new After Victory homes they will look for beauty of design and soundness of structure of course, *but they will also demand the right kind of equipment for Better Living BUILT-IN!*

GENERAL ELECTRIC

HOME BUREAU

BRIDGEPORT, CONN.

SPACE AND TIME FOR Victory

In mile after mile of factories, offices, and laboratories, America is providing Space for Victory—floors that will take the hardest wear, will promote efficiency by quietness and foot-ease, will require almost no maintenance—Kentile floors! And they'll be "ready for work" on time, too, because this new floor is so speedily laid (piece by piece). We are proud of Kentile's war work on the biggest jobs. We are proud, too, that it is also one building material so plentiful you can get it for those repair jobs and "freshening up" tasks important on the home front. Know all about this remarkable, superior new material. Mail the coupon for the free booklet giving all of Kentile's advantages, among which are:

1. Kentile, although resilient and beautiful, is one of the most durable floorings—used in heavy duty plants.
2. Kentile is one of the lowest cost floors made.
3. Kentile is moistureproof—used for countless "problem" areas—even on concrete in contact with earth.
4. Kentile resists all regular staining—cleaned by a mop.
5. Kentile is laid with amazing speed—is available at once—installed by contractors in any part of America.
6. Kentile offers a million patterns and colors—any design you conceive with its 44 colors, 15 tile sizes.
7. A Kentile floor can later be altered in any part without disturbing the other areas.

KENTILE
Asphalt Tile
Trade Mark Reg.



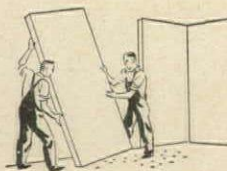
DAVID E. KENNEDY, Inc., Dept. D.
58 Second Avenue, Brooklyn, N. Y.
Send ☐ Catalogue ☐ Grease Tester ☐ Representative

NAME _____

ADDRESS _____

CITY, ETC. _____

Save up to 50% on installation time with KIMSUL* Insulation



By using the new wider and longer blanket of KIMSUL*, you now can save up to 50% on time required for installing insulation. Here's why: this giant-size KIMSUL comes in blankets up to 4 ft. wide, and wider in some specifications, by 250 ft. long.

Less Work — More Speed

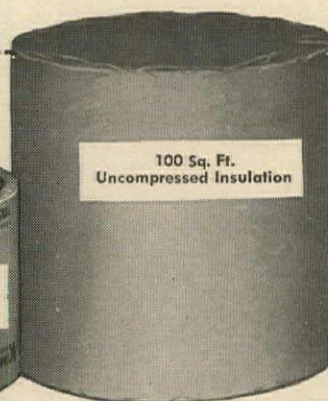
Giant-size KIMSUL blanket is applied right over

fabricated wall panel . . . wall finish is then attached directly over KIMSUL Insulation, and fabricated unit is ready for shipment to the job. See photo-story below for quick picture of this new, faster way to insulate fabricated construction.

And remember, when you specify KIMSUL, you're getting one of the most thermally efficient insulations known to science! The conductivity of KIMSUL Insulation is only .27 Btu/hr./sq. ft./deg. F./in. (Peebles).

KIMSUL SAVES EVERY WAY!

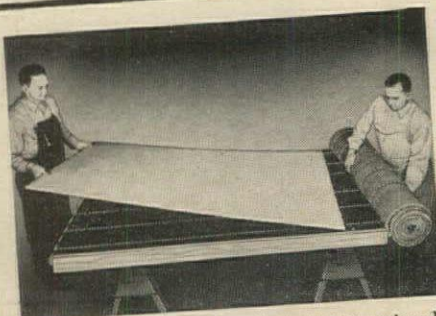
Different from all other insulations, KIMSUL comes in rolls compressed to 1/5th its installed length. As compared with non-compressed insulations, KIMSUL requires only 1/5th as much transportation space . . . only 1/5th as much storage space . . . only 1/5th as much handling. And as shown here, KIMSUL cuts up to 50% from installation time.



TYPICAL EXAMPLE WALL UNIT ASSEMBLY



In this picture you see how easily and speedily a 4-foot wide fabricated wall panel assembly is being covered with the new giant-size KIMSUL blanket Insulation.



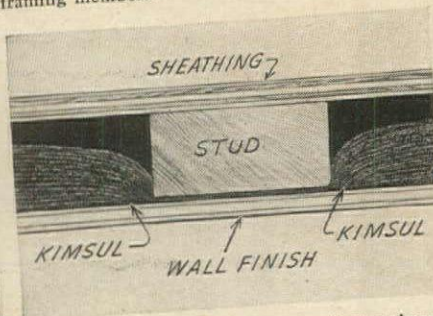
Here you see the inside wall finish being placed directly over the KIMSUL blanket Insulation. Wall finish is now ready for nailing direct to framing members.



Here wall finish is nailed through KIMSUL blanket to framing members . . . KIMSUL blanket is held firmly under compression between framing members and wall finish. KIMSUL "stays put".



Note how KIMSUL is held securely in place. Panel is now ready for application of sheathing. This new method of applying insulation is acclaimed by contractors from coast to coast!



KIMSUL in the walls. This sectional view shows how KIMSUL Insulation ply construction compresses uniformly between the framing members and the plywood.

KIMSUL INSULATION



Kimberly-Clark Corporation
Established 1872
Building Insulation Division
Neenah, Wisconsin

- ☐ Send a representative.
- ☐ Send free booklet "A NEW, IMPROVED KIMSUL INSULATION".

Name _____

Address _____

City _____ County _____ State _____

*KIMSUL (trade-mark) means Kimberly-Clark Insulation

**PRATT & LAMBERT
PAINT AND VARNISH**



THE NEW HOTEL STATLER AT WASHINGTON, D. C.

HOLABIRD & ROOT, Architects, Chicago; New York • A. R. CLAS, Associate,
Washington, D.C. • JOHN W. HARRIS ASSOCIATES, INC., General Contractor,
New York • WEST WOODWORKING CO., Cabinet Contractor, Chicago
TRYLON STUDIOS, INC., Decorating Division of Statler Hotels, New York



Photo, Horydczak, Washington

THE new \$8,500,000 Hotel Statler at Washington, D. C., is another important link in a chain of noteworthy hotels. Containing 1,000 rooms, this latest unit in the nation's capital will provide traditional Statler service to a steadily-increasing group of guests.

Designed to harmonize with recently-built structures in the area, the new hotel on 16th Street occupies a block from K to L, and is but six blocks from the White House. The four wings are eight stories high. On the K Street side will be specialty shops.

In the new Statler, representing the last word in modern hotel construction and facilities, Pratt & Lambert Paint and Varnish products serve to enhance the architectural beauty of its interior. Recognition of dependable, quality finishing materials by the Statler management is evidenced by the consistent use of Pratt & Lambert Paint and Varnish in all Statler hotels. Whatever the project, the P&L Architectural Service Department offers prompt, efficient co-operation in achieving maximum decorative results.

PRATT & LAMBERT - INC., Paint & Varnish Makers
NEW YORK • BUFFALO • CHICAGO • FORT ERIE, ONTARIO

A Declaration of Faith in Your Future — and Ours

CHICAGO
MINNEAPOLIS
OMAHA
KANSAS CITY
SALT LAKE CITY
LOS ANGELES
ST. LOUIS
MEMPHIS
ATLANTA
DETROIT
PITTSBURGH
PHILADELPHIA
BALTIMORE
WASHINGTON, D.C.



L. J. MUELLER FURNACE CO.

Heating and Air Conditioning

2005 W OKLAHOMA AVENUE
MILWAUKEE - WIS.



H. P. Mueller,
President — the
third generation
of Muellers in
this 85-year-old
business.

To the Building Industry:

The chief thing that we have to sell to you today is our faith in the future of the building industry, and our belief that improved heating and air conditioning equipment must play an important part in that future.

We are engaged in a branch of the industry that has seen the curtailment of its normal efforts, the shutting off of many vital materials, the rationing of its products -- without complaint and with a willingness to do cheerfully anything necessary to make a contribution toward the all-out war effort which alone assures a future for any of us.

In the long view, when this great effort brings victory, it becomes merely an interruption in the history of progress. In our own case, we have lived through three major wars and several depressions during the past 85 years -- each time emerging stronger than before.

During World War I, the L. J. Mueller Furnace Company devoted almost 100% of its effort towards the production of material used in successful prosecution of the war.

In this war, we have made constant adjustments in an attempt to continue the production of our line of heating equipment where it would do the most good in the war effort, for defense housing, industrial plants, military barracks, etc.

We have also undertaken the manufacture of many items foreign to our regular line which are required by our armed forces. At the same time, we have expanded our research and engineering facilities for the further refinement and development of our line of heating products.

When peace comes, you will find us ready with a line that is right up to the minute and with a name that is well and favorably known to your clients. We are planning confidently to continue our pleasant relations with you, in the interest of a successful and mutually profitable post-war building program.

Sincerely yours,

H. P. Mueller
President

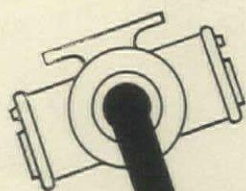
BUY
WAR BONDS
— save for the
future and help
the war effort
NOW

MUELLER *Milwaukee*
HEATING AND AIR CONDITIONING

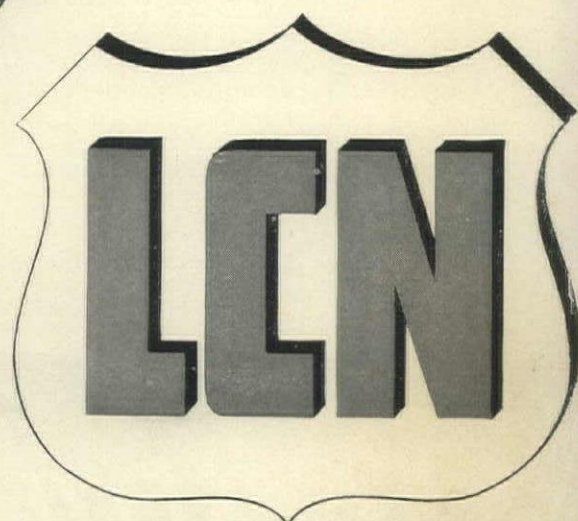
B-11



ONE HUNDRED PER CENT
SMALL PARTS PRODUCTION
FOR

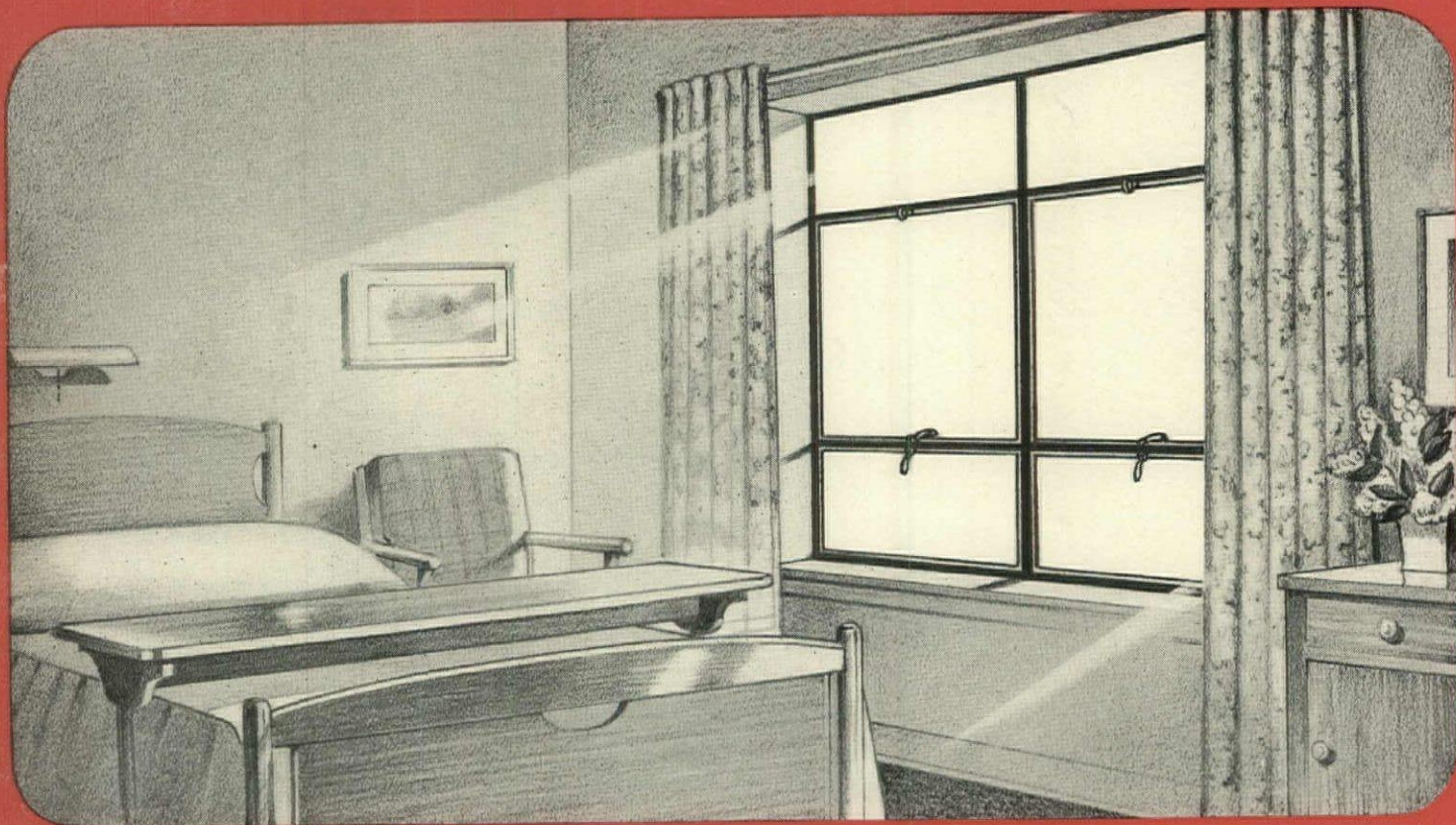


VICTORY



DOOR CLOSERS

The post-war hospitals you design will be **BRIGHTER AND MORE CHEERFUL**

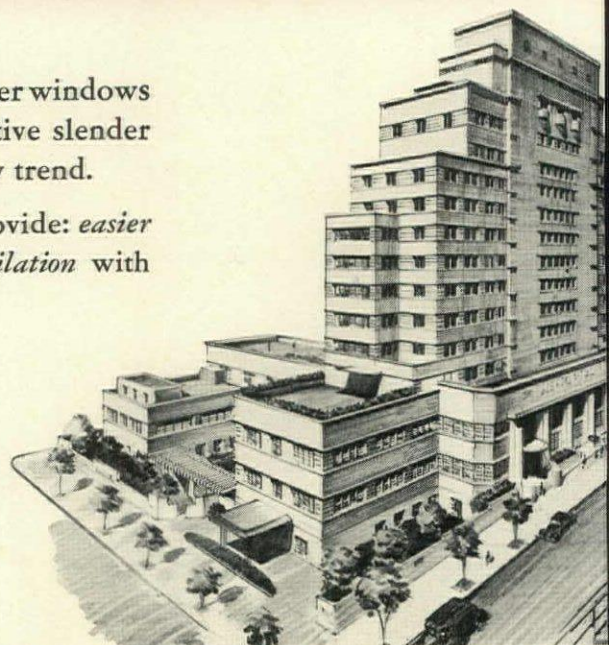


This is because your Post-war Hospitals will be daylighted with larger windows and more of them. Built of metal, these windows will have attractive slender frames and larger glass areas to admit more light . . . that's the new trend.

And besides the better light, Fenestra Hospital Windows will provide: *easier opening*—metal ventilators never warp, swell or stick; *better ventilation* with protection against severe weather and direct draft; *superior weather-tightness*—precision-fitted to stay tight; *safer washing*—both sides of glass washed from inside; *increased fire safety*—metal does not burn. And the cost will be surprisingly low.

New window designs are now being developed by Fenestra's Research Engineers. Any window ideas and suggestions you may have will be gladly received.

DETROIT STEEL PRODUCTS COMPANY
Dept. AF-11 • 2252 East Grand Boulevard • Detroit, Michigan



MEMORIAL HOSPITAL, NEW YORK CITY
James Gamble Rogers, Architect
Henry C. Pelton, Associate

Fenestra **HOSPITAL** Windows



25 YEARS OF PROVIDING THE EAGLE WITH CLAWS!

..... AND TWENTY-FIVE YEARS OF ACCUMULATED
"KNOW HOW" IN THE MANUFACTURE OF MUNITIONS FOR UNCLE SAM
AND OF PROVIDING OUR GOOD CUSTOMERS WITH QUALITY
BRASS AND COPPER PRODUCTS.

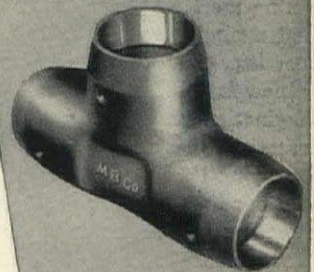
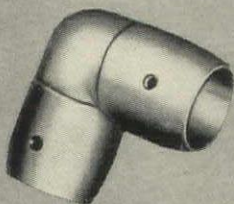
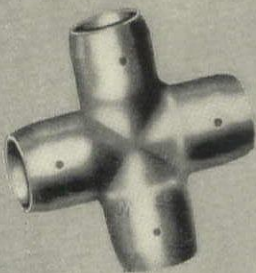
TWENTY-FIVE YEARS AGO THIS FACTORY WAS WORKING ENTIRELY FOR
UNCLE SAM—in fact, our country's need in the first World War was the
very reason for our birth and existence. TODAY WE ARE AGAIN WORKING
100% TO SUPPLY WAR MATERIALS FOR OUR ARMED FORCES—AND
DURING ALL THE YEARS BETWEEN THE FIRST AND SECOND WORLD WAR
IN WHICH WE WERE BUILDING A LARGE DOMESTIC BUSINESS, WE ALSO
CONTINUED TO SUPPLY ORDNANCE MATERIAL FOR UNCLE SAM'S NAVY.

STREAMLINE Copper Pipe and Fittings are now in the service of our country
for many purposes. They are installed in naval vessels of practically all
types including victory ships, sub chasers, submarines, mine sweepers, etc.
They are used for plumbing, heating, refrigeration, air conditioning, oil
lines and a multitude of other services afloat and ashore.

On this our TWENTY-FIFTH ANNIVERSARY, we dedicate ourselves to an all-
out effort for war . . . knowing that only through the winning of
it can we gain a lasting peace. When peace returns to the
world, we can regain those businesses of which we are now
temporarily deprived, and STREAMLINE Copper Pipe and Fittings
will once more protect the health of the nation as they are
now protecting the health and lives of our men in the service.

We Proudly Fly the Army-Navy "E"
for Excellence and Timely Produc-
tion of Ordnance Materiel.

STREAMLINE
PIPE AND FITTINGS DIVISION
MUELLER BRASS CO.
PORT HURON, MICHIGAN



ERASED MOLDS

FORUM:

The House of 194x was designed in thirty days. The Defense House of 1942 was designed in approximately the same time. Yet the House of 194x is almost invariably good and the Defense House almost invariably bad. Had the Defense Housers been thinking housing, living housing, dreaming housing, during the months preceding the assignment of their commissions, they might have done what the 194x Housers did. Lack of preparatory thinking and not lack of designing time made the difference in the results.

In this special number (Sept., 1942) THE FORUM uncovers some of the current thinking about living after the war. In so doing it takes the next step in insuring that what happened to defense housing shall not happen to peace housing. In presenting the House of 194x, it asks a really fundamental question: do we want a fuller, freer life, or are we satisfied with the life we now have? It reminds us that lack of imagination and lack of desire are the only limitations to the lives we lead. The war is destroying the molds which have crystallized our lives. THE FORUM, in this issue, is erasing from our minds the patterns of these molds.

HARWELL HAMILTON HARRIS

Los Angeles, Calif.

INTEGRATION COMMENT, CONT'D.

FORUM:

... I do not agree that prefabrication is going to be the future construction field nor that the Government is going to participate as much as they have in housing, nor that speculative builders are going to be the ones to produce low cost houses.

I do not believe or agree likewise that new and fancy gadgets will overcome the local materials and labor now employed to produce a good five-room house for \$2,500 as durable as Mount Vernon. My observations, therefore, are contrary to your article (Postwar Pattern, Oct., 1942) and there is no use for me to consume time to argue them with you or your staff. I do pass my criticism along however. ...

GEORGE W. WEST

Atlanta, Ga.

FORUM:

... This article hits right at the heart of the problem facing the building industry. I am convinced that we must develop an integrated industry if there is to be any real progress in the industry. This war program has done a great deal to prepare the way for such development—it has helped remove many barriers such as antiquated, restrictive codes and has clarified the position of labor in regard to many new techniques.

There is no doubt but that the mold or pattern of the postwar housing industry is being built right now, and it is up to the industry to read the signposts and follow the right road. Your articles are a real contribution to this trend and serve to stimulate thought in the right direction. ...

BURNS ROENSCH

Houston, Texas

FORUM:

... It impresses me as an excellent article, simply and clearly expressed, and concurs entirely with my own ideas plus some excellent new ones which I had not thought of, but which I wholeheartedly approve.

HARVEY WILEY CORBETT

New York City

FORUM:

... I go along with your conclusion that "What is needed, for the moment at least, is not so much general agreement on a precise scheme which can be voted into existence and carried out tomorrow, but the freest possible discussion of basic underlying problems and sweeping proposals that can be the clay pigeons at which explosive comment can be fired." Before you talk about "industry integration" I think that you must differentiate between industrial building and house building. Complete integration of Building may make a handsome, efficient pattern on paper; but such a perfection pattern could hardly take into account the regional variations of climate, utilities resources, and density of population, to say nothing of the differing factors between large metropolitan centers, small cities, rural villages and widely spaced farm homes. Homes are the core of the society for which Americans are working and fighting; and planning for home building in the future has to be in terms of the intangible values of home to the individual even more than of the accountable values of business efficiency.

I do not mean to suggest that with the resumption of peace-time building the inefficiencies and stupidities of the past are to be tolerated. We know many of the changes that are needed to improve the conditions of home building. Most of them can be accomplished by persuasion or occasionally with some judicious coercion. Beyond the job of correcting mistakes and abuses will be the war developments of new materials and improved operating methods. The advances of this combination applied in terms of families and neighborhoods should supply practical cushioning against some of the harder jolts of the postwar adjustment period.

Above all, we ought to be able to shake loose from costly and needless requirements embedded in ordinances or legislation by selfish action either of contractors, manufacturers or labor unions. ...

RAY LYMAN WILBUR

Stanford University, Calif.

FORUM:

... [As to the factor of "final liquidation,"] I am not clear as to how any large-scale developer can be expected to demolish housing facilities while they are still useful. A developer who develops projects for rental, wholly or in part, will necessarily have to maintain them well, and if they are laid out on sound lines as to light and air, their rate of depreciation will be greatly reduced and their basic obsolescence more or less indefinitely deferred, obsolescence and replacement of equipment taking place at more or less frequent intervals.

The only valid basis for liquidation is unsafe or unhealthy conditions. Low rental housing cannot afford the luxury of rapid obsolescence. Sound construction used over a long life will produce the greatest economy in terms of annual rentals. To build cheaply intentionally with a view to demolition and reconstruction in some short span of years will produce poorer housing at higher rentals, with the probability of not actually being torn down as originally intended.

The city alone can secure demolition of unsafe or insanitary housing. So far as I am aware there is, as yet, no example of such housing that has been built originally by a large-scale developer of the sort you have in mind. Liquidation of private property must be left to the action of municipal authorities. The same authorities should cooperate in large cities, with properly constituted development corporations, to see to it that the new development will not be such as will create, in the future, the sort of depreciated areas that now constitute the need for such action. ...

WILLIAM STANLEY PARKER

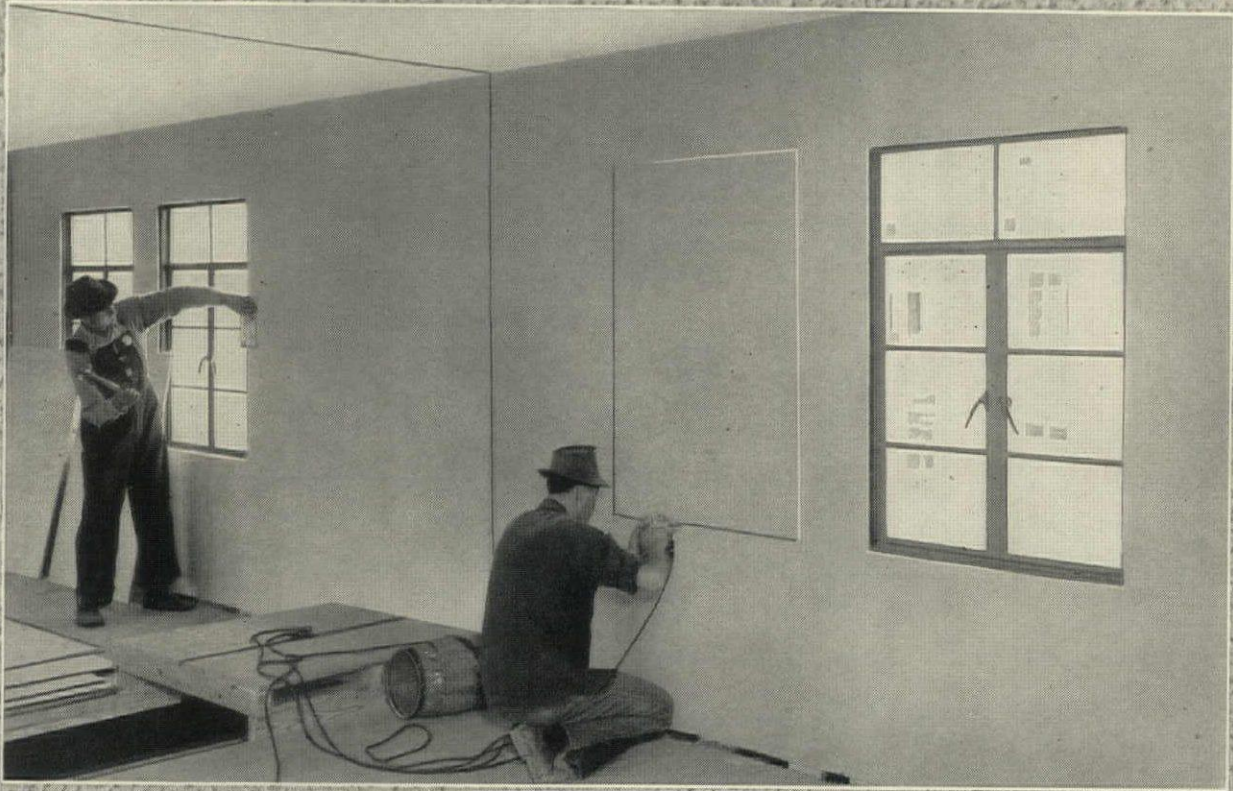
Boston, Mass.

FORUM:

... Should new methods prove adaptable for building housing units that are attractive and acceptable to the ultimate consumer, then and only then will we witness a real adjustment in the production and consumer contact organizations. That the test being made by our citizens housed in modern housing units may result in popular acceptance of such results, is a question which can only be

(Continued on page 106)

HURRYING FOR UNCLE SAM?



Don't let outmoded methods of applying interior walls and ceilings bottleneck your schedule. Full wall construction with Upson Strong-Bilt Panels will save you two to three precious weeks of construction time—conserve critical materials and spread available manpower over a greater number of units.

If you are building 100 units or more, *giant panels*—big enough to cover an entire wall—can be delivered, pre-cut to size and numbered for immediate application.

For smaller projects we have speed systems for handling and cutting at the site to save you time and money.

Field Supervisors, trained in the elimination of non-essential operations, and with "know-how" gained on scores of big projects, can be supplied. Phone, wire or write us. The Upson Company, Lockport, New York.

► **NO BOTTLENECKS:** 40 to 50 man-hours application time for average family unit. Ideally adapted for line assembly.

► **NO WATER:** No moisture. No drying out period. Dry-build any month of the year.

► **NO TAPING:** No cutting or filling of joints.

► **NO NAILS TO COUNTERSINK:** No filling of holes or spots to mar finished surface, when Upson Floating Fasteners are used.

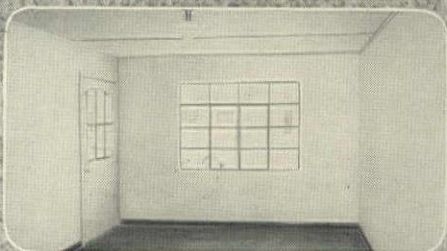
► **NO REPEATED PAINTINGS:** Single coat usually sufficient for pre-sized panels. Painting begins immediately following application of trim.

► **CRACKPROOF:** Assures lasting beauty with low maintenance cost.

► **INSULATION VALUE:** Up to 3½ times that of plaster. High resistance to transmission of sound.

► **FHA ACCEPTED:** Liberal terms "streamlined" for the duration.

Upson Quality Products Are Easily Identified by the Famous Blue-Center



Walls and ceilings of enduring beauty which remain forever free from ugly creeping cracks.



Occupants invariably prefer the crisp, fresh beauty of walls and ceilings made with Upson Strong-Bilt Panels.



**UPSON
STRONG-BILT
PANELS**

**THE BEAUTY SURFACE FOR WALLS
AND CEILINGS**

To all users of **MENGELBORD** and **Mengel Flush Doors**

Ever since the War began, The Mengel Company, America's largest producer of hardwood products, has been undertaking the responsibility for a rapidly-increasing amount of vital war production.

Today our plants are turning out millions of feet of aircraft veneers for gliders and cargo and training planes, and other millions of feet of plywood for aircraft, boats, Army and Navy buildings, furniture, ammunition boxes, etc. We are turning out precision wood parts for thousands and thousands of Army cargo truck bodies, and doing many other high-priority war jobs. . . .

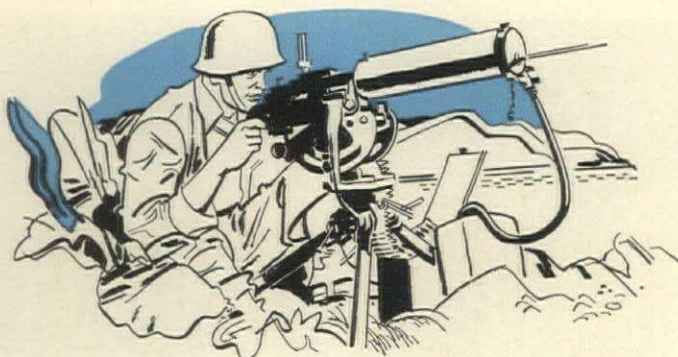
And still the demand increases, until we have had to entirely subordinate our output of

all Peace-time products to the multiplying needs of our boys in khaki and blue. . . .

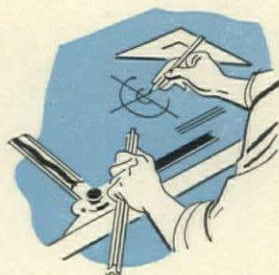
That is why, today, we are unable to give you the kind of service you're accustomed to getting on Mengelbord and Mengel Flush Doors. But much as we would like to be earning your friendship and good-will by superlative service and delivery, we know you will agree that our first duty is to the Nation.

In the meantime, we are trying to produce for you as much Mengelbord and as many Mengel Flush Doors as can possibly be turned out *without interference to the War program*. We know you would heartily disapprove any other course of action, and we appreciate your friendship and your patriotism in yielding first place to the Armed Forces.

THE MENGEL COMPANY, Incorporated
Louisville, Kentucky



The future
is what we're fighting for,
isn't it?



Every reader of this advertisement believes, somehow, that the future is worth the fight. Production records say so. Your personal sacrifices say so. Your crowded hours say so.

We read your hearts as we read our own.

But what about this future, anyway? Are we going to accept it as it is served up to us, or are we folks in industry going to do a job of pre-fabrication on it?

We can, you know.

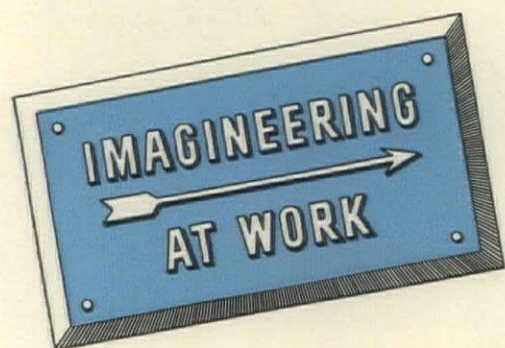
We *can* do some Imagineering, here and now. We *can* decide where we go from here. We *can* slip an eighth day of thinking time into our crowded seven-day week, if we will.

We can build new models, in our minds at least. We can take the facts and the promise of the new materials and methods we are learning about in the war, and dream them into the new products and improved services that will make new jobs.

We can even provide the wherewithal which will prime the future. Every War Bond we buy does that. The future is more than a hope. It is a duty.

Getting together on future ideas is putting Imagineering into practice.

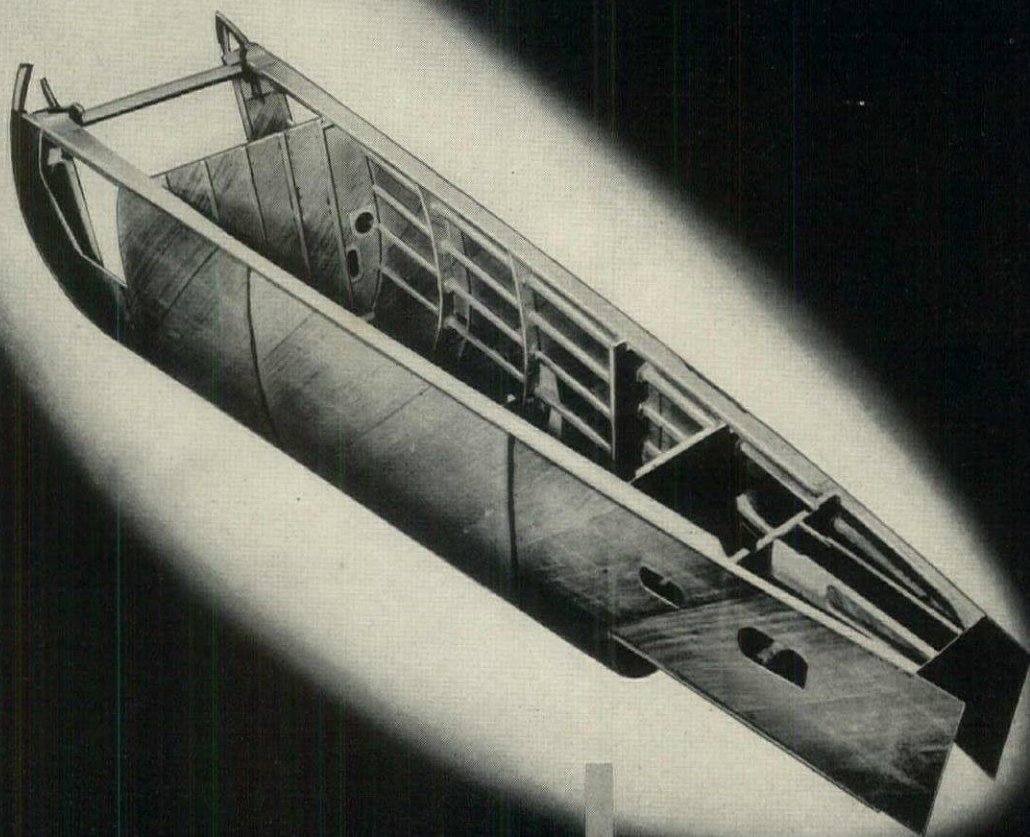
Might you and we do just that, for the sake of the boys who are fighting to give us all a future? ALUMINUM COMPANY OF AMERICA, 2166 Gulf Bldg., Pittsburgh, Pa.



ALCOA ALUMINUM



STRENGTH RIGIDITY LIGHT WEIGHT



IT isn't a boat—though it could be. It isn't a baby buggy—though it might be. Actually, it's an unfinished rear fuselage section for an airplane. An example of how wood-and-glue can replace critical metals wherever strength, rigidity, and light weight are required.

This intricate piece of wood fabrication may suggest other constructions having the same basic requirements—perhaps a piece of home "machinery" still on your drafting board. Particularly where you could use wood's bonus of beauty, smoothness, and warmth of touch.

Let us tell you what can be done with wood-and-glue.

CASEIN COMPANY OF AMERICA

DIVISION OF THE BORDEN COMPANY

Technical Service Dept. 350 Madison Ave., New York, N. Y. Manufacturers of **CASCO** Powdered Casein Glues, **CASCAMITE** Urea-formaldehyde Resin Glues, **CASCOPHEN** Phenol-formaldehyde Resin Glues—for plywood, laminated wood, joint or bag gluing

SEND FOR THESE BOOKS:

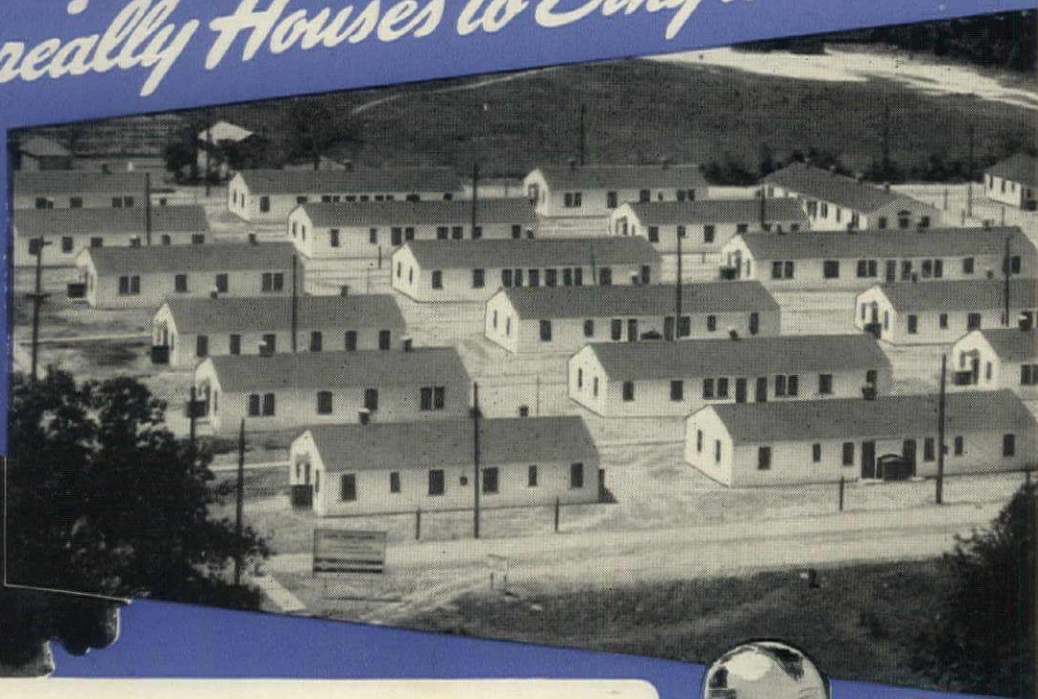
A. I. A. Folder
"Glued, Laminated
Wood Beams, Arches,
Roof Trusses"



A. I. A. Folder
"Glued Prefabricated
Houses"



"They're really Houses to Sing about!"

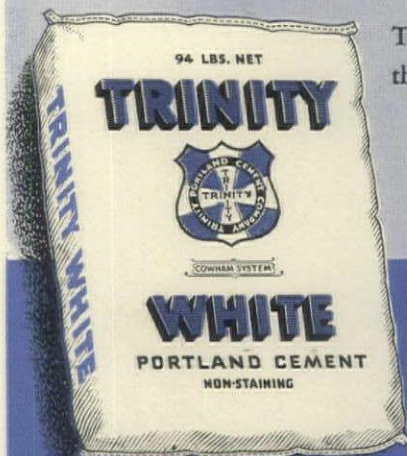


"Right you are, Dave. Mind if I suggest the words . . . 'Their walls catch the gleam of the morning's first beam.' Pardon the pun, but I can't help being enthusiastic about these particular defense homes."



"I wanted distinctive exteriors when I designed this job. That's why I specified stucco. Not only would it save both time and critical materials in its application, but it would provide a subtle beauty as well."

"You can see for yourself the results we secured. These houses are radiantly alive today and will be easy to keep fresh looking and attractive for years to come. Stucco has given them new permanent beauty."



TRINITY WHITE, the "whitest white" Portland cement, will produce the whitest white stucco and clearer, sharper colors in colored stucco.

Photograph at top is of Low Cost Housing Project, Fayetteville, N. C.
Architect: Basil G. F. Laslett. General Contractors: McDevitt & Street
Co. Waterproofing and Gunite Contractor: Western Waterproofing Co.
Trinity White used as finish coat. Gunite application over cinder block.



"AS WHITE AS SNOW"

TRINITY WHITE
PORTLAND CEMENT
PLAIN OR WATERPROOFED

☆ WORTH REMEMBERING...THE STEEL SASH MERIT-METER PROVES MESKER GIVES YOU AT LEAST 35% MORE QUALITY FOR YOUR MONEY! ☆

MESKER STEEL WINDOW ENGINEERED

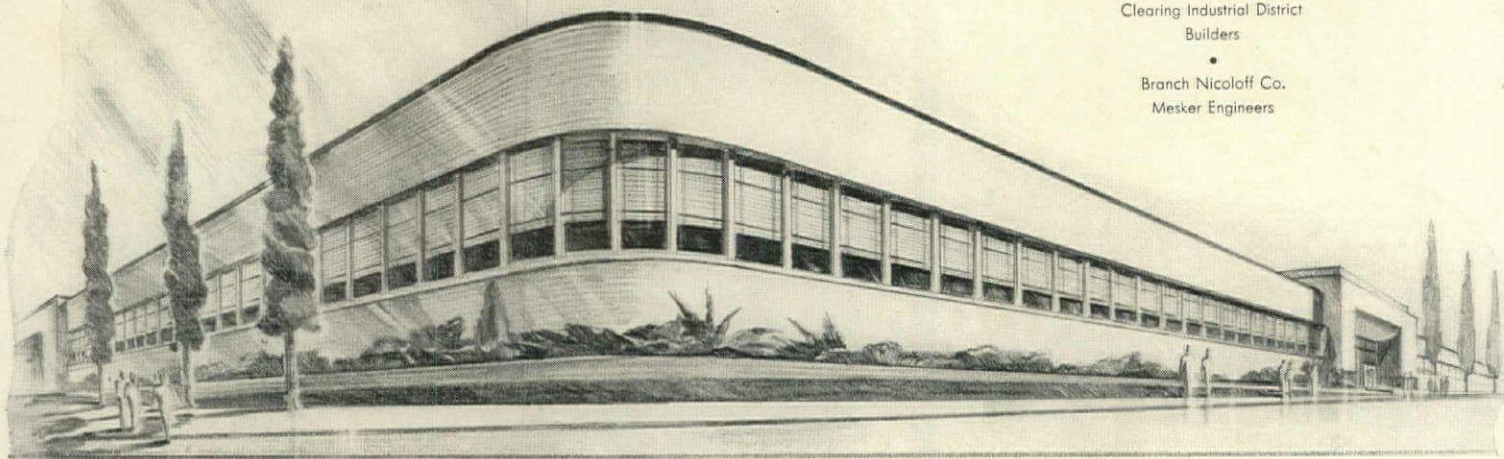
DIAMOND T MOTOR COMPANY

Chicago, Illinois

•
John S. Cromelin
Architect

•
Clearing Industrial District
Builders

•
Branch Nicoloff Co.
Mesker Engineers



corrosion **RESISTANT...**

Outside Putty Glazed Sash offers many advantages over ordinary Inside Glazed Sash. Although a slight additional cost is involved, Sash

of this type is far more corrosion-resistant, since putty covers 90% of the exposed metal. It requires less frequent paint-

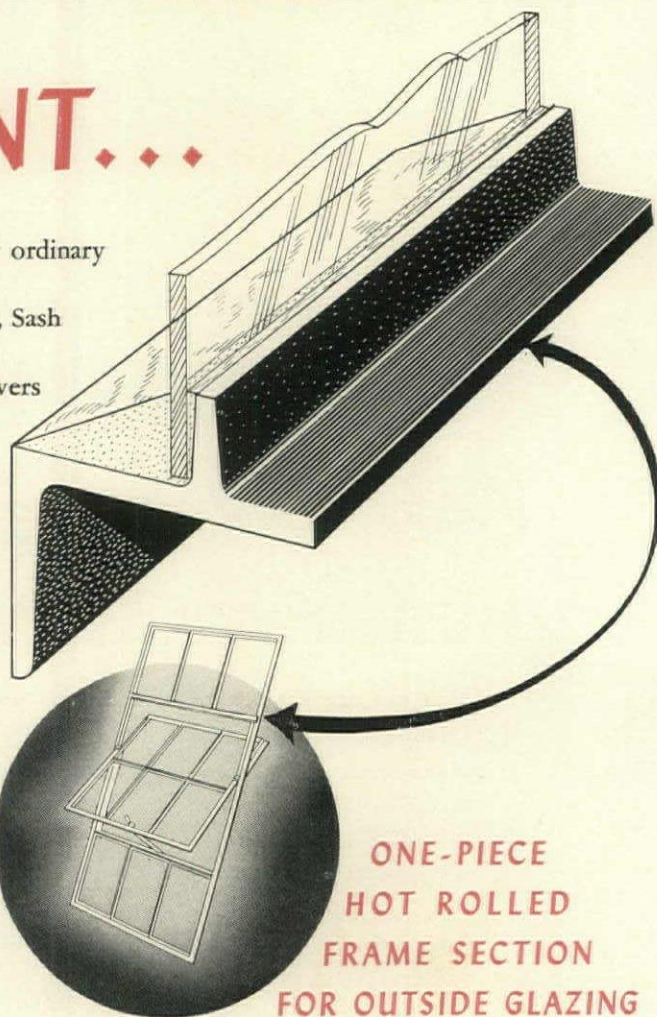
ing; is often easier, safer to glaze. While most manufacturers "improvise" it from ordinary Sash, Mesker has developed the only Sash of this type that is 100% efficient... NOT makeshift. Special designs, tools and machinery are employed to turn out Mesker's "OPG"

Sash... a highly specialized product. In the future, look to the window *with a future*... MESKER.



THE DOUBLE THICK WEATHERING BAR

...used on Mesker Industrial Pivoted Sash is $\frac{1}{2}$ " thick...twice that used by others in Industrial Steel Sash. This exclusive feature, so dramatically illustrated by the Visual Test Kit (free upon request), is indicative of the quality built into ALL Mesker products.



**ONE-PIECE
HOT ROLLED
FRAME SECTION
FOR OUTSIDE GLAZING**

Mesker Brothers

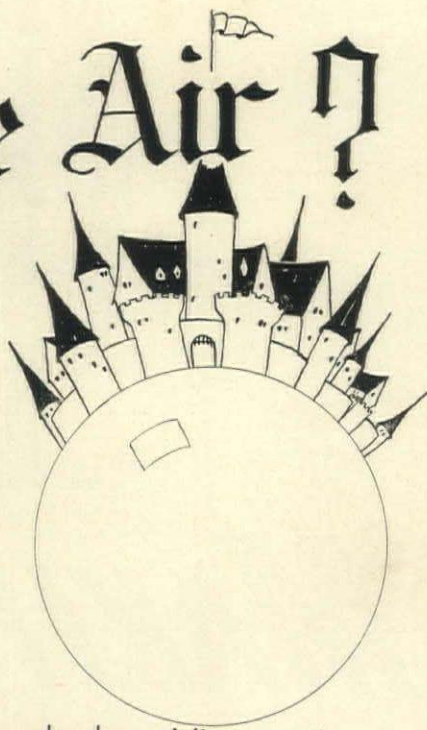
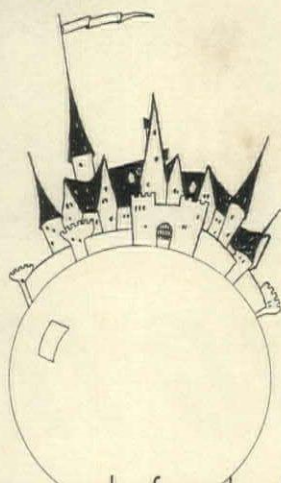
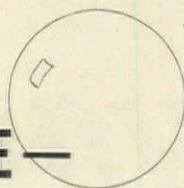
STEEL SASH

424 SOUTH SEVENTH ST., ST. LOUIS, MO.

CASEMENT WINDOWS • MONUMENTAL WINDOWS • INDUSTRIAL WINDOWS
INDUSTRIAL DOORS • METAL SCREENS • DETENTION WINDOWS

Castles in the Air?

MAYBE—

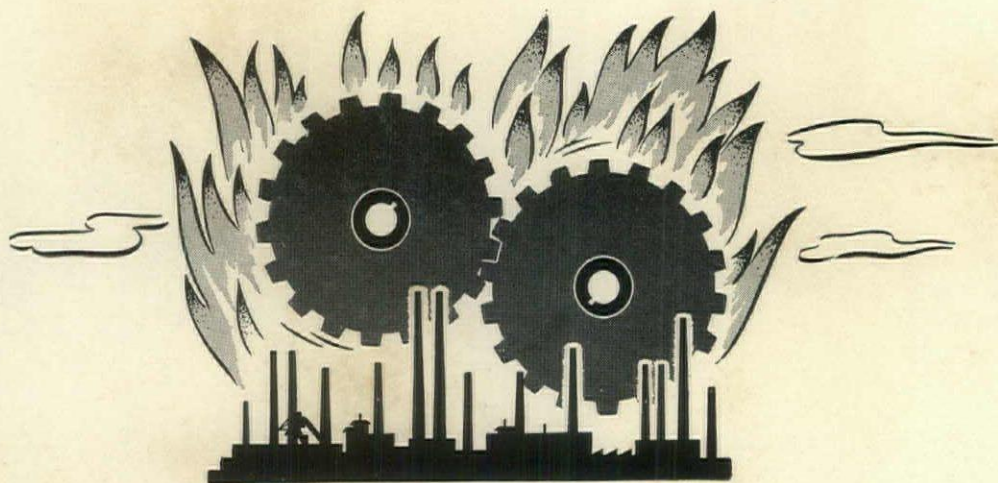


But in order to be ready for the load when Victory is won and peace comes, and the multitudes of men are returned to civilian life, post-war planning is a requirement NOW.

In this planning, prefabricated housing will play a large part, with designs for better living, a higher standard for the new life, and a rapid, convenient, and economical method of home building.

Therefore, in line with these ideas for the future, designs and plans are being tested in our departments for immediate production of *Stylecraft* **HOMES** when the war ends.

ILLINOIS LUMBER MANUFACTURING COMPANY
CAIRO, ILLINOIS

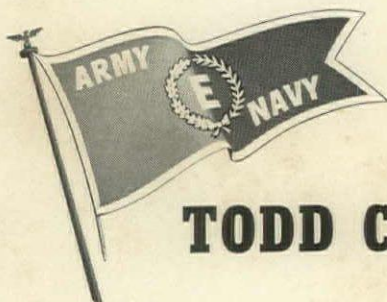


MAKING IT HOT FOR THE AXIS

ON AMERICA'S MIGHTY PRODUCTION FRONT

WANT to know what "Made in America" means in Tokio, Berlin and Rome, these days? Ask Doolittle! Ask the flying Tigers! Ask our fighting men and allies everywhere! With each passing day, more American-made planes . . . guns . . . tanks take their toll on every battlefield — and plenty more are on the way! In a war of machines, America's production front smashes ahead at top speed — is rapidly strengthening American armed might for the final all-out assault on the Axis.

Behind today's manufacturing achievement is the story of America's power production—for mine, mill, factory, assembly line. In power plants of every type, as well as in fighting and merchant ships, over 50,000 Todd units are contributing their full share of this basic horsepower—hanging up new records everywhere in the efficient combustion of liquid and gaseous fuels.



Todd technical service staffs, stationed in key cities . . . with parts and replacements instantly available . . . are helping to maintain uninterrupted power for America's mighty production line.

TODD COMBUSTION EQUIPMENT, INC.

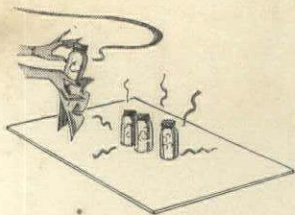
(Division of Todd Shipyards Corporation)

601 West 26th Street, New York City



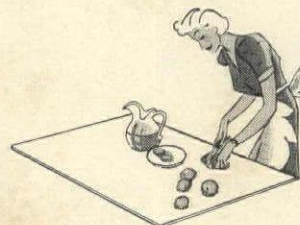
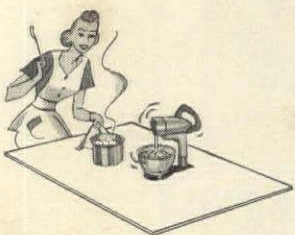
NEW YORK MOBILE NEW ORLEANS GALVESTON SEATTLE BUENOS AIRES LONDON

For Victory . . . Buy U. S. War Bonds and Stamps



a Libbey-Owens-Ford Product
TEMPERED VITROLITE

comes to the rescue of work surfaces



Many of the materials you have used for work surfaces have been sent to war. So now, in their place we have developed a new and better work surface material . . . *Tempered Vitrolite*.

Our engineers recognized the multiplicity of demands that such a material must serve. Vitrolite combined many of the required characteristics. Its surfaces are smooth, sanitary, nonporous and easy to clean. It is stainproof and resistant to all common acids. It is opaque, made in the purest white or in a wide range of other attractive colors.

One step was necessary to make Vitrolite the perfect work surface for industrial use as well as

for kitchen tables, cabinets and shelves. By a special process we tempered it and endowed it with an iron constitution. Through this process it becomes so strong that it will support the weight of an average family. It is amazingly resistant to physical impact. It stands thermal shock so well you can place it on a cake of ice and pour hot molten lead on its topside without causing a crack.

Tempered Vitrolite is solid and substantial . . . sanitary and easy to clean. Its surfaces are harder than most metals. Be sure you have complete details. Write Libbey-Owens-Ford Glass Company, 1327-A Nicholas Building, Toledo, Ohio.



LIBBEY • OWENS • FORD

QUALITY *Flat Glass* PRODUCTS



Illustrated is 2" Gold Bond Gypsum Roof Plank with shiplap side

ACTION PICTURE OF 3 PIONEERS

IF you look closely, you'll see the third and most important member of this trio—Gold Bond Gypsum Roof Plank. It's a new Gold Bond development—already proved in practice—which nails directly to wood joists, requiring no metal attachments. No critical materials are used in its manufacture, either, so there's plenty available for immediate shipment.

Gold Bond Gypsum Roof Plank is ideal for industrial and military

construction. It goes on in a hurry—no special skill needed—any carpenter can apply. Once planked, the roof can be surfaced without waiting for materials to dry, which saves additional time.

Made from processed gypsum rock, it is unaffected by heat, cold or moisture. Fireproof. Rigid. Lightweight. Easy to handle. Inexpensive enough for the most temporary structures. Sturdy enough to give

years of good service. Supplied $1\frac{1}{2}$ " and 2" thick, in lengths of 8', 9' and 10'.

And one big added advantage—the under side of this plank is finished in ivory which serves as the interior ceiling. No further decoration required.

GOLD BOND GYPSUM ROOF PLANK is only one of Gold Bond's wartime developments which are helping architects and engineers to do a better job of designing efficient, low-cost structures. Two others are Gold Bond Exterior Board and 1" Solid Partition Panels. For complete information and specifications, write National Gypsum Company, Buffalo, New York.



BUILD BETTER WITH

Gold Bond

Everything—for walls & ceilings

**More than 150 different products for
MODERN CONSTRUCTION
AND WAR PRODUCTION**

NATIONAL GYPSUM COMPANY . . EXECUTIVE OFFICES, BUFFALO, N. Y.

21 Plants from Canada to the Gulf . . . Sales offices in principal cities

THE MONTH IN BUILDING . . . **NEWS**

Use of existing housing space the month's big story (this page) . . . Rent control becomes national on OPA's ruling (page 34) . . . Women in industry bring new problems to Building (pages 34-35) . . . Schools open courses for construction instruction (page 35) . . . War makes this Building's biggest year: total construction and estimates for 1943 (page 36) . . . Ferdinand Eberstadt made Building's boss under Nelson (page 36) . . . Two conventions of the month: Morell and Fleming speak in Toronto (page 96), the CPHA meets in Los Angeles (pages 96-98).

USEFUL SPACE, BILLETS DOUX

War housing has now reached the point where it should have started. Instead of new building, the program is now to fill old houses. Impetus is the contemplated complete stoppage of new building, increasing scarcity of critical materials, forced realization that soon there would be little else to turn to. Two other outs were considered: Conversion and Billeting, the first an increasingly important consideration for the harried housers.

Lease and After. As noted last month (FORUM, p. 33), NHA has moved to a new program (Homes Use): leasing houses for the duration in areas where workers' homes are badly needed. Noted, too, were the alterations, sometimes complete con-



OWI

FRANK BANE, new director of Homes Use Program, has been trouble-shooting for years. Career milestones: American Public Welfare Association in Chicago; Administrator of Social Security Board, Washington; Director, Council of State Governments; active in the organization of what is now the OCD. Virginian by birth, in his late forties, vigorous, dynamic and a demon at direction, Bane was the logical choice to head the troublesome new program.

**OSWALD E. LOOMIS: on borrowed HUP time**

versions, that would be necessary in these homes. This month meager outlines were filled in: HOLC will be used for carrying out alterations. To NHA will go veteran Oswald E. Loomis (see cut), Executive Assistant to HOLC Commissioner Fahey to start the work. More successful in hawking their wares to Government than architects, private real estate men (and *not* expanded Government bureaus) will arrange the property, make minor repairs, etc.

Terms of leases: the Government will assume all losses during the period of the lease—interest and principal payments on mortgages, taxes, upkeep expenses, etc. Rentals will be "satisfactory," houses will be returned to owners within a "reasonable" period after war's end, owners however, will be permitted to occupy part of the converted structures "if necessary."

Fifty-six active war centers will be the scene of this experiment on new housing methods. If successful, it will be extended to adjacent areas, will doubtless serve countless roof-needy numbers.

Rumors about billeting, were heard in the Capital's crowded corridors. The wise men inspected the English experience with billeting, found it good, turned their thoughts to trying the same scheme here.

(Continued on page 34)

British billeting. Evacuation of women and children from cities early in the war brought the English face-to-face with billeting problems. Local households visited by welfare officers volunteered to house as many evacuees as possible. Not until three years later, when housing of workers became the problem, was compulsory billeting established: The Minister of Health was empowered to declare an area critical, to remove when necessary persons living there to other less critical areas, to billet in vacated homes essential workers in nearby industrial centers (Statutory Rules and Orders, March 5, 1942, No. 381). Billetees do their own negotiations if the owner volunteered his home; otherwise, a 5-shilling blanket price is Government-imposed. So closely did the official billeting officers comb all possibilities that billets are now running short.

Over here billeting, like sex, is still spoken of in hushed tones. The necessity is recognized, but Government lawyers have expressed unofficial doubts that any existing statute is broad enough to permit commandeering of homes or property. That this is no genuine drawback is proved by the English use of emergency statutes when they needed them: new legislation is easier to get than new building—and less costly. For the present, “volunteer” billeting—the war guest idea—will be tried here.

One of the prime problems now facing the Homes Use Program is zoning. Difficulty: the number of structures in which roomers may be accommodated (within the limitations of the present zoning ordinances) approaches the vanishing point. More and more space available to war workers is to be found in restricted residential districts where such occupancy is now prohibited. Necessity: reasonable adjustment in zoning controls; action by local governments (since NHA has no power to take such measures) through proper legal procedures to grant for-the-duration permits.

Zoning liberalization, if treated like all other emergency measures, need not mean permanent detriment to any area. Stressing the financial benefits as well as

the patriotic duties involved, HUP wants action.

RENT CONTROL SPREAD

Last month there was an exchange of letters between Henderson and the President. Roosevelt wrote:

“That part of the nation which has not yet been designated within defense rental areas should now be so treated. We should make no distinction between city and country residents as to their participation in the total war effort . . . I wish you would immediately issue appropriate orders to prevent rent increases in urban and rural dwellings. In such areas as you deem appropriate to reduce current rents, I am sure you will proceed to take such action as may be necessary.”

OPA acted rapidly. All areas in the country which previously had not fallen into the defense rental category were so designated, it was recommended that ceilings be imposed at March 1, 1942 levels by state and local authorities within 60 days. Thus, all the nation's metropolitan districts (sole exception: New York City—pop. 7,000,000) are now subject to Federal rent control—97 new areas as of November 1.

Other uncontrolled stepchildren were stores, restaurants, hotels, lodging houses, commercial buildings. Last month saw moves to adopt these into the rent control family:

►Reported unanimously in midmonth to the House Banking and Currency Committee was the Steagall bill, permitting the President to fix rental rates in commercial buildings, hotels, etc., at Sept. 15, 1942. Fixer: new Economic Stabilizer James F. Byrnes. Prediction: The bill will meet little opposition, move quickly into effect.

Same bill includes a section on hotel rent control. With hotel business booming since the start of the war, prices have boomed too. Boom appears to be even greater due to Army occupation of many strategically located hotels (see FORUM, Sept., p. 188). Flagrantly high rates have been reported: In Los Angeles there have been instances of \$18 a day being charged to men in uniform.

Sly evasion rumors trickled in all month, proving that easiest move was to rule rent control in effect, toughest to police its effectiveness.

►Trick No. 1: Eviction of tenants threatened by forced “phoney” sales. Solution: Beginning Oct. 20, a home purchaser cannot obtain the right to occupy property until he has paid one-third of the purchasing price and until three months have passed. Violation fines are stringent.

►Trick No. 2: Hotels (example: the Monticello in Norfolk, Va.) have forced guests to register non-existent companions and pay double room rent. Solution: OPA obtained an injunction against the hotel.

LADIES IN LABOR

►The U. S. Employment Service lists 460 kinds of industrial war jobs for women.

►By the end of 1942 there will be an increase of more than 1/2 million women employed in nonwar occupations, an even greater increase in needed women-power in 1943.

►In the first quarter of this year, 1 million women were working in war industries. The Department of Labor estimates that before July of next year, 2 million more will be added, “reaching a peak in total woman-employment of over 15 million—3 1/2 million of them in war work.”

Women in industry mean, to Building, two things: changes in existing factory buildings to accommodate needs of women, construction of day nurseries to care for war workers' children of pre-school and school age.

Of the first, very little has been done. Rumor, unsubstantiated, had it last month that some factories did not hire women workers because their buildings lacked toilet facilities. Queries to major plants however, revealed that expansion or conversion of this sort was a simple process.

Concerned with construction of suitable washrooms was the Women's Bureau of U. S. Department of Labor (Director: Mary Anderson), which issued a bulletin laying down rules for location, minimum requirement standards, minimum floor space allotments, costs, etc., concluding



SELF-CONTAINED COMMUNITY for Negro war workers is this \$1,300,000 Clinton Park (Houston, Texas) development. Conceived, constructed and put into operation through private enterprise and private funds under Title VI, workers of its 500 families are employed

in Houston Shipbuilding yards and other war industries. Surveys revealed less housing for Negroes in Houston in 1941 than 5 years previously. Site selected was a 50-acre park, average lot size is 55x120 ft., average house (third pix) has 2 bedrooms, a living room,

that "with new plants under construction to meet defense needs, old ones expanding and employing women in many cases for work once done by men, the construction of suitable washrooms becomes an important part of every building program."

Second problem, nursery schools, is still in the when-we-can-get-around-to it stage. Despite the active interest of many groups (National Commission for Young Children, Committee for the Care of Young Children in Wartime, etc.), little has been done. Early in the summer five projects were submitted to Washington under the "little" Lanham Act (Public Law 137) to provide for the needs of pre-school and school-age children in off-time.

Early in September the first project got under way in New Haven, with a \$30,427 allotment under the paternal eye of Brig. Gen. Fleming's FWA. Organization of the work was done through the local Board of Education.

►Other moves: Washington, D. C.'s Randolph Bill awaits House District Committee's action. This would provide WPA nursery schools for the District (funds to come from the \$6,000,000 Congressional allotment made available to WPA).

►English example again presented itself this month with arrival of first pictures (above) of new emergency huts, erected wherever needed throughout crowded London areas to care for children. Economic, useful, attractive, they prove that England has learned the lesson the U. S. still ignores: women in industry, new war communities, mean child care—and thus construction—of this sort.

►Queries: (1) Are there *existing* buildings in critical areas that can be used for this purpose? (2) Where should they preferably be located? To (1) the answer is almost always No. To (2), there is general feeling in Federal agencies that locations near plants or factories smacks of a kind of dread state socialism.

Whether preferred or not, however, lack of usable space elsewhere, and the reasonableness of factory locations for these schools, will probably drive those concerned to settle for them. Financial con-



British Combine

BUILT IN ELTHAM, suburb of London, these pictures show England's first hut school. Built to accommodate 88 children, it contains 2 classrooms, a cloakroom and toilet room. Thus far plans call for 30 more, designed as a wartime expedient to meet restricted school accommodations in newly overpopulated war areas.

sideration (a sly one) is that when funds become scarce, such schools can always be regarded as "community facilities," and thus constructed as such.

EDUCATIONAL BOOM

The nation's largest industry, building, has never had a training program adequate to its needs. Now, with liberal-art curricula in most universities suffering a knockout blow by the war, is the time. Johns-Manville, recognizing a growing need for more and better trained manpower in the light-construction field, is sponsoring a widespread educational program. Guiding hand in the program's formation was Arthur A. Hood, Director of Dealer Relations for the Johns-Manville Corporation. Twelve

universities have instituted courses in light-construction engineering and marketing. Open to qualified high-school students, including about 48 subjects, designed to offer promising careers in the postwar building industry to young men and women and to offer to the industry well-trained workers, J-M's program is the first major guarantee of informed and enlightened personnel for the active postwar years.

The Apprentice-Training Service of the FSA recently completed compilation of the National Standards for Carpentry Apprenticeship designed as guide for local employer-union committees in formulating programs for specific localities.

Defining a carpentry apprentice (4 years of continuous employment, 144 hours of classroom instruction per year), as well as educational and physical requirements of candidates, FSA is taking immediate steps to train more carpenters in the face of looming, widespread shortages.

CONSTRUCTION COUNT

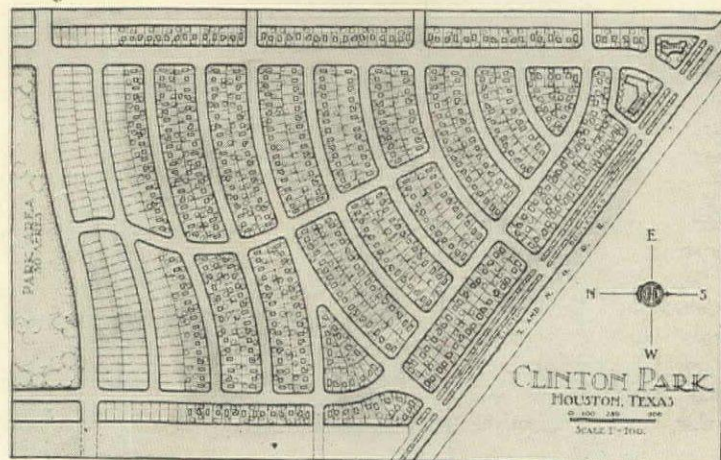
Comes year's end, and adding machines in Washington's myriad bureaus are hard at work totting up what has been done in the past year, estimating what will be done in the next. Bureaus notoriously differ (famous variances: between the Bureau of Labor Statistics and the Department of Commerce), but the main outlines concurred (see below).

1942: ►First-half total construction (\$5,934,000,000) represents a gain of 22% over the same period in 1941, a 6% falling off from the last half of 1941.

►Last-half total construction (estimate: \$5,792,000,000) represents a decrease of 2.5% under the first half.

►Total (\$11,726,000,000) represents an increase of about 5% over 1941, 68% over 1940.

►Lion's share (71%) for 1st half year went for Government construction, is expected to (Continued on page 36)



kitchen, bath, side porch, an attached garage. Following seven basic house designs, the homes, complete with lot cost \$2,435-\$3,025. Construction time was 4 months. Area has thus been converted from sub-standard mud-infected site to a development (see plan) com-



plete with community center, theatres, transportation system, through close correlation of operative builders, lending institutions, FHA and the ultimate owners themselves. In operation Clinton Park is a complete, self-sufficient community, with active community spirit.

reach 82% in the last 6 months. Cub share — and becoming progressively smaller of course — will be private building — 15% of all construction.

1943: ► Estimated construction total (subject to revision: \$7,125,000,000) shows a 1/3 overall decrease from 1942 (see chart).

But more powerful indication than even these tentative figures was letter mailed by Donald Nelson to 8 Government agencies. Wrote Boss Nelson:

"As things now stand facilities and construction, including many projects not related to the war effort, programmed for 1943, with the carry-over of uncompleted 1942 projects will absorb between one-fifth and one-fourth of the total war effort."

"As a result the aggregate demand of such projects for material, labor, transportation, manpower, and technical and engineering services is so great as not only to jeopardize the various military and essential civilian production programs in general, but to force the most essential war projects dangerously behind schedule . . ."

Army and Navy were included in the admonition. Next step will be to prepare a list of public projects that meet the acid test of "essentiality" (add this word to your Washington vocabulary); anything else is out of luck until after war's end.

To second hottest spot in the nation's production setup last month came Ferdinand Eberstadt (see right), in name a vice chairman of WPB, directly below Donald Nelson, in fact the boss of all construction for the coming year and head of the Facility Clearance Board.

His past: Corporation lawyer in Wall Street, partner in the investment-banking firm of Dillon, Read, in 1928 he sold his partnership for a reputed \$2 million, started his own company. Last January he went to Washington at request of Under Secretary of the Navy Forestal, Under

Secretary of War Patterson, worked on the Munitions Board. He is a close friend of Lieut. Gen. Somervell, has sided with the Army in its WPB battles. A long, hard worker, Eberstadt never gets ruffled, is a hard-headed, tough decision-maker with a prodigious success record behind him.



Eberstadt: He hung a SRO on Building

His agenda: With an advisory board, newly appointed, to aid him (Col. Gordon E. Textor, vice chairman; S. E. Skinner, SOS's civilian official; Brig. Gen. Bennett Myers, Army Air Force; Joseph W. Powell, Navy Procurement; Rear Admiral E. M. Pace, director of Materials, Navy Bureau of Aeronautics; Rear Admiral Howard L. Vickery, vice chairman, Maritime Commission; and Maurice Wertheim, Office of Civilian Supply), Eberstadt's job is to review some \$7-16 billion worth of projects, chiefly governmental, programmed for next year, is expected to halt about \$5 billion (?) of this work. Donald Nelson's rage when his researchers informed him that construction was consuming almost one-third of total war expenditures will be transferred to his new vice chairman — with drastic cuts as a result.

The first Eberstadt order came late in the month. With all construction the theatre of his operations, Boss Eberstadt, convinced that more tickets had been sold than there were seats, issued new construction standards on all war housing, stopped the issuance of priorities on privately financed war housing effective October 27.

The standards: "The War Production Board will not issue preference rating orders unless . . . a minimum of critical

materials and lumber is used, and will not extend the term of preference rating orders unless they have been applied to the purchase of materials, or prefabrication or construction of the project has started or the construction of the project complies with following standards":

► Single-family detached units, for rent or sale, must be constructed only when essential utilities are contiguous to the lot.

► All rental projects of every type must be designed without regard to future separation of a portion of the project and with minimum use of critical materials.

► All structures must be laid-up masonry or other lumber-substitute exterior wall construction, except in areas where these are not obtainable.

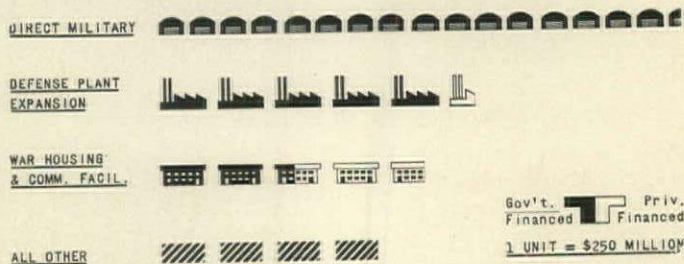
The stoppage: Effect of the order stopping priority awards to privately financed war housing was immediate. The Home Builders Institute sent Frank Cortwright, its executive secretary, to protest to Col. Textor; Mr. Cortwright was assured the ruling was only temporary, the WPB had no intention of halting essential private war housing.

FWA, asked to drop 220 projects, has offered 122 to the axe, wanted time to "study" others destined for extermination or suspension for the duration. Those offered up with no further study include 117 small highway projects, two public building projects on undisclosed sites, a certain number of WPA construction projects (airport grading, highway work, nothing very large-scale), and five school projects under the Communities Facilities program: new school building in Escambia County, Fla., and additions to schools in Oceanside, Calif., Turtlecreek, Pa., Audubon, N. J., Vancouver, Wash.

Notice having already been served on eight Federal bureaus (see above) interested in various types of construction. Eberstadt's agenda includes equally stringent orders to state and local governments to trim their public works programs. His job will include a none-too-gentle tug-of-war with Government agencies who cannot be expected to give up their pet projects without a fight. Ditto local chambers of commerce, Congress itself.

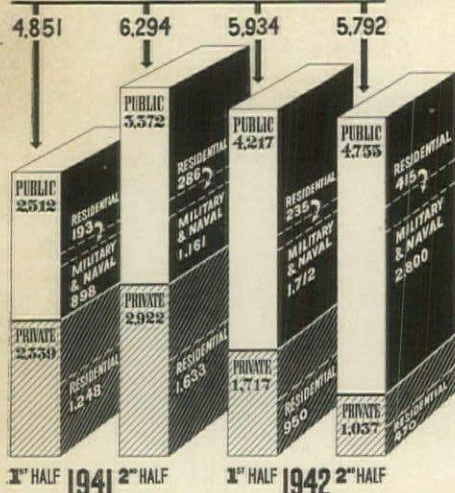
(Continued on page 94)

ESTIMATED NEW CONSTRUCTION — 1943

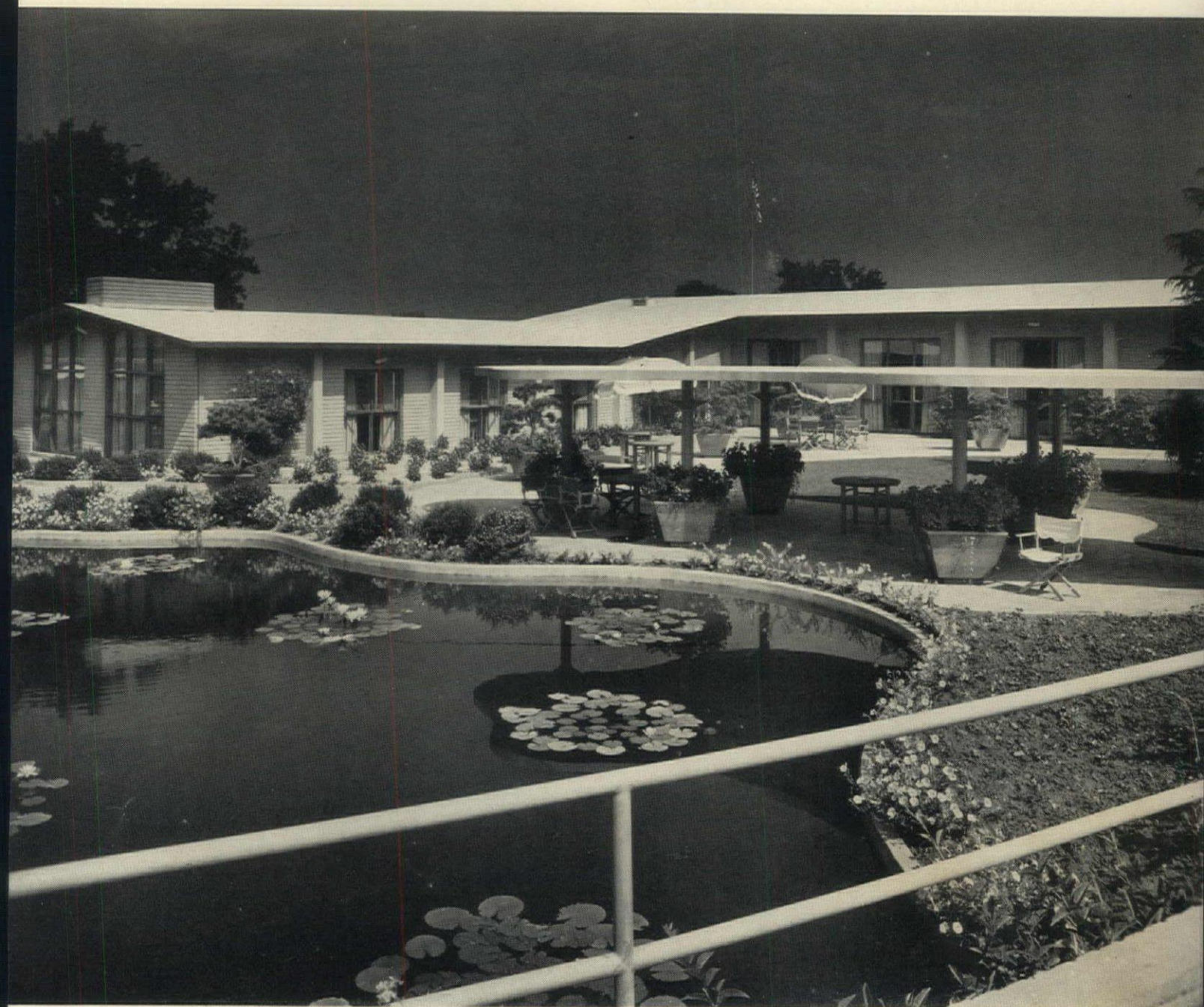


Figures in all instances are estimated and subject to revision. Source: War Production Board, Construction Section, Statistics Division.

TOTAL NEW CONSTRUCTION — 1941-2



Figures are in millions of dollars. Those for 2nd half of 1942 are estimated. Source: U. S. Department of Commerce.



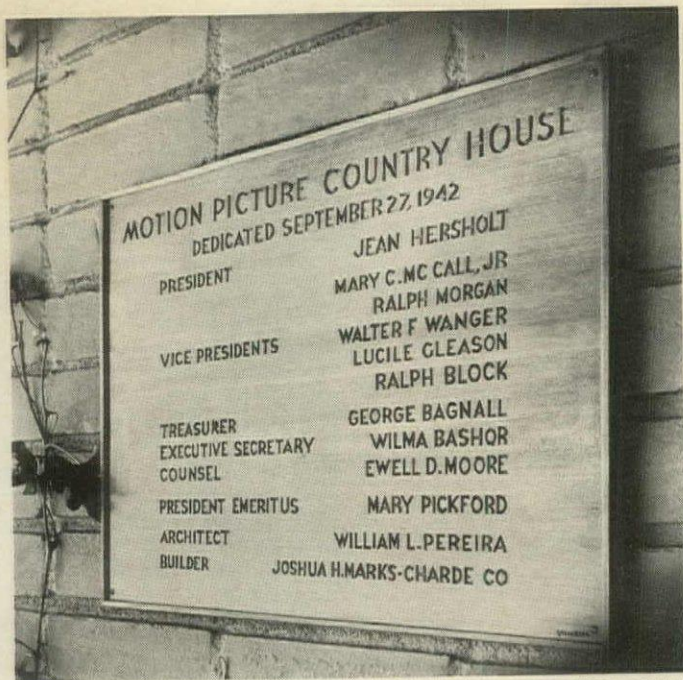
Maynard L. Parker

MOTION PICTURE COUNTRY HOUSE

SAN FERNANDO VALLEY, CALIF.

OFFICES OF W. L. PEREIRA, ARCHITECT

N O V E M B E R 1 9 4 2



Maynard L. Parker

JOSHUA H. MARKS-CHARDE CO.
GENERAL CONTRACTOR

E. C. HILLMAN, JR.
STRUCTURAL ENGINEER

HAROLD RUBEN
LANDSCAPING

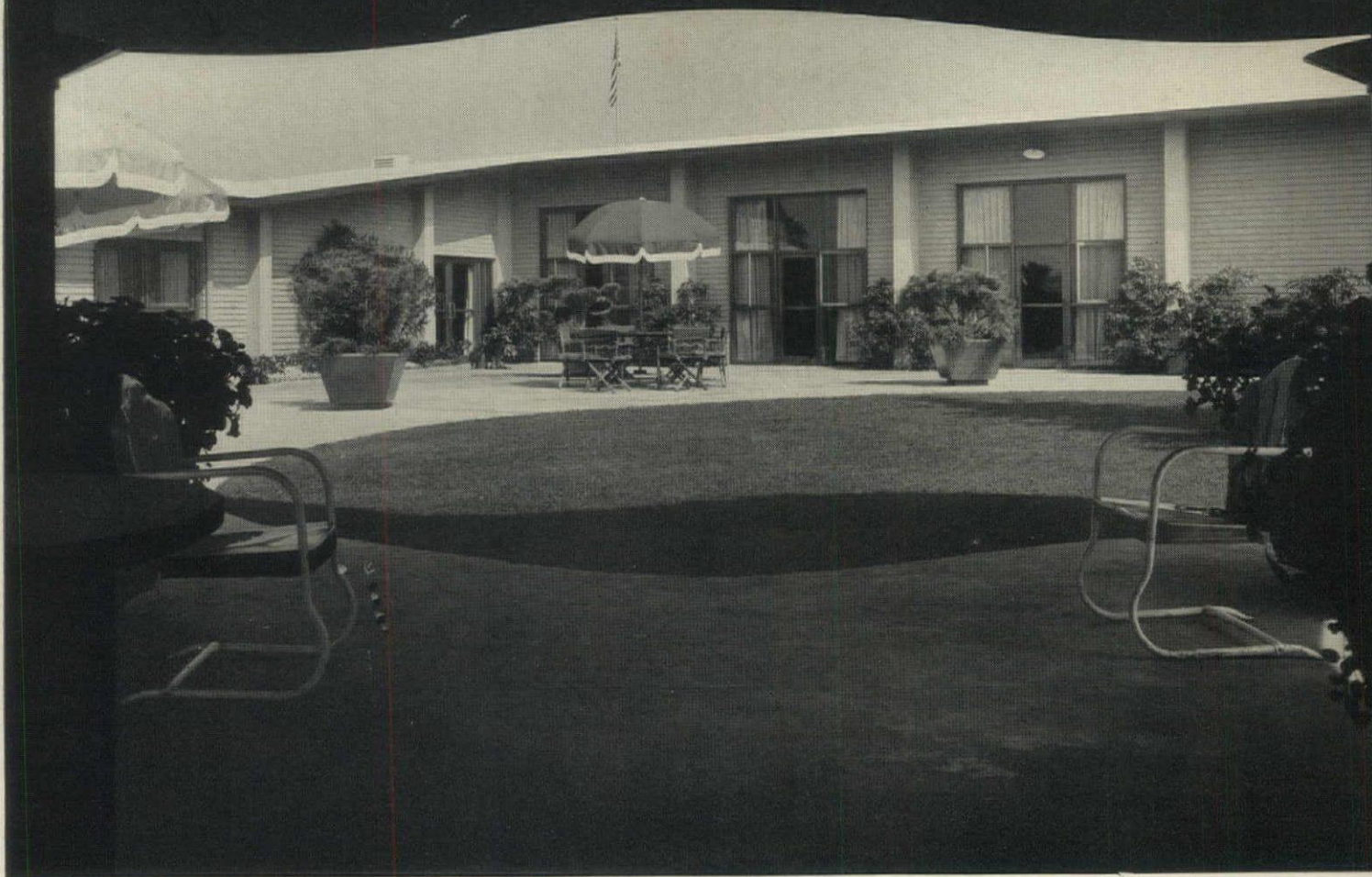
SOCIETY OF MOTION PICTURE DECORATORS
FURNISHINGS

The Motion Picture Country House is the visible result of a cooperative venture that is probably unique in American industry. It is equally remarkable as an example of what a talented architect can do in group housing when he rejects the premise of "a certified public accountant method of enclosing a certain amount of space at a certain cost and then expecting people to be happy living in that space." This is the story of the Country House project as outlined by the architect:

"The Motion Picture Relief Fund came into being after the last war. It is a family welfare organization, established to provide food, shelter, clothing and medical attention for indigent members of the motion picture industry. In 1940 it aided 8,095 families with a total relief expenditure of \$362,000. The income is derived from voluntary weekly contributions of one-half of one percent, from all people in the industry earning a salary in excess of \$100 per week. "Three years ago, the Fund was able to sell the Gulf Oil Company a weekly radio program for \$10,000 per week. Scripts and performances were contributed by people in the industry, and their fees were automatically assigned to the building fund of the Motion Picture Relief Fund.

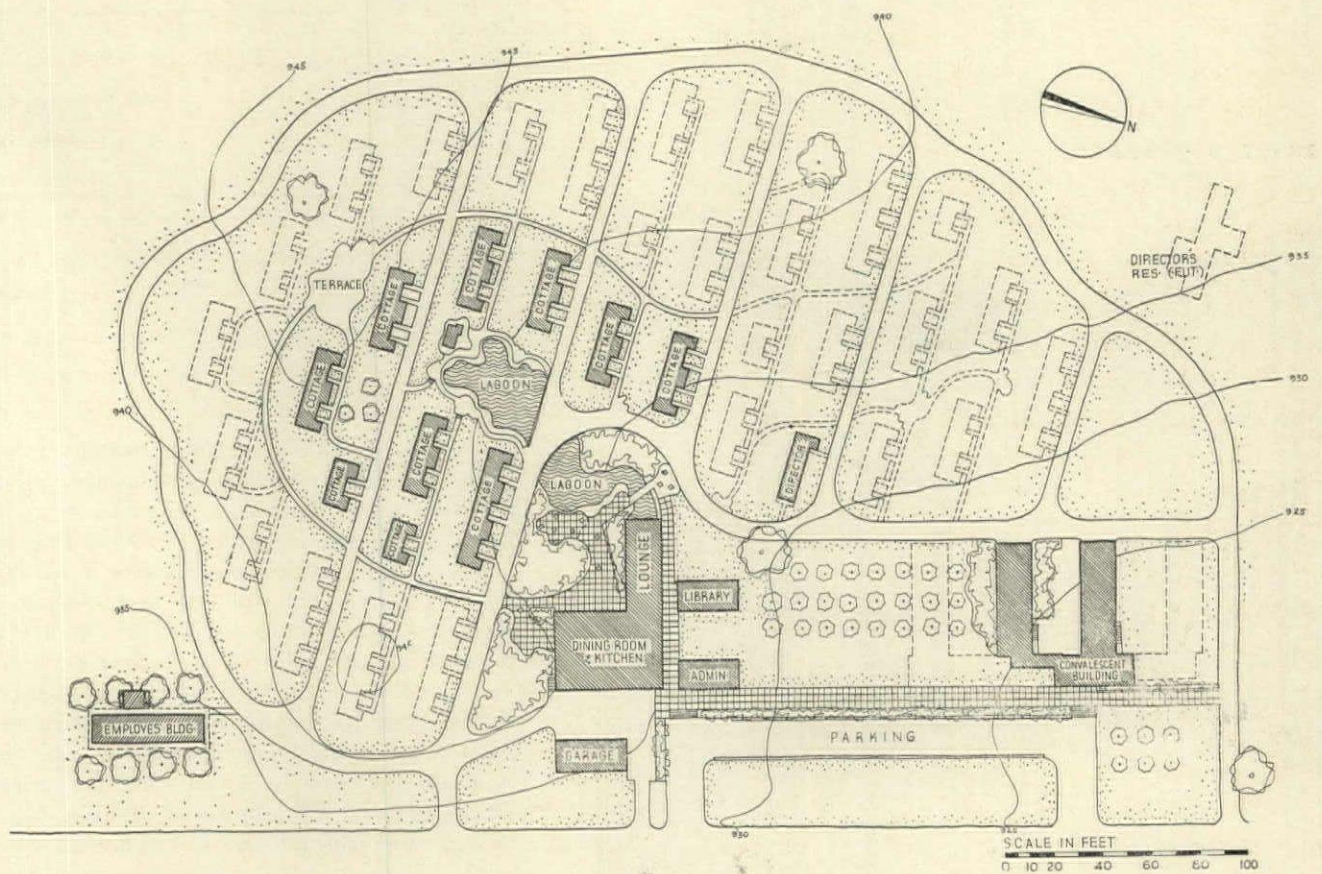
"I was given carte blanche to analyze the needs and design the group. The program was one of the most interesting I have ever seen. Among other things, it offers proof that this very young industry has become adult from a social viewpoint, and it points to the existence of something that few industries could reveal: a proud spotlight on its veterans. Actually this industry has now done away with the black spot of a poorhouse, replacing this ugly institution with homes for aged workers which are not offered

as "charity," but as earned compensation for past services. "The project lies on forty-one beautiful acres. It is now covered with walnut and citrus trees. The plan provides accommodations for 164 people in small bungalow residences consisting of two, four and six units. All of these units face the south, and are connected by broad footpaths and roads. While the placing of these residences is along mechanical lines, the placing of the roads and footpaths, and the construction of two lagoons with very free landscaping, have produced a very natural, easy-looking community. The winding walks provide several routes from one part of the project to another, giving the elderly residents a chance to vary their daily promenades. In no case do they have to walk more than 350 feet from their private living quarters to the community buildings. Covered walks offer shelter from both midday sun and rain. The lagoons, incidentally, are irrigation reservoirs as well as decoration. "All private living units in the community are related to a central group of buildings, consisting of a lounge, library, commissary and administration unit, arranged on terraces overlooking the lagoons. At a reasonable distance there is a medical building, containing ten private wards, the usual utility units, surgery, dental clinic, electro-, hydro-, and physical-therapeutic units. Still further away there is to be a completely equipped 450-seat theater. As an occupational therapeutic device, nothing more suitable could possibly be conceived. These people, who have served their time in the industry, although penniless, have one great, common interest, and that is the theater. Here they will be able to see good plays and motion pictures, and also produce and act in their own productions."



TERRACE, CENTRAL BUILDING

Maynard L. Parker



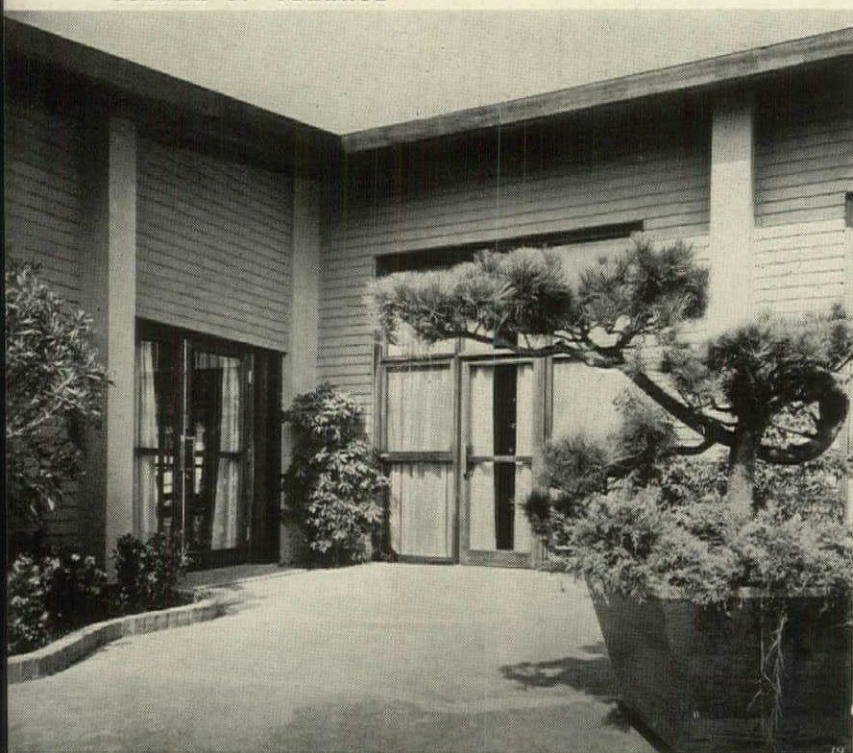
PLOT PLAN



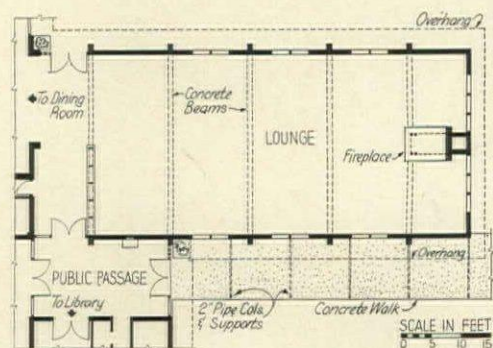
ENTRANCE TO LOUNGE

Maynard L. Parker

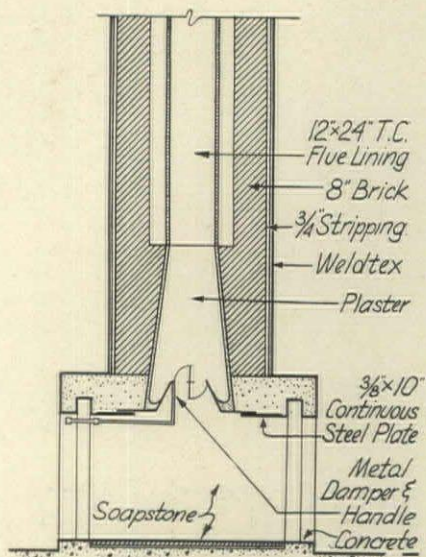
CORNER OF TERRACE



Fred R. Dapprich



The largest building in the group contains the lounge, dining room and kitchen. The lounge, shown on these two pages, is a simple rectangle, 30 by 74 feet in area, given interest by the sloping ceiling and the exposed beams. Its design vocabulary is standard for the large units: the structure is a concrete frame whose columns are exposed outside and the beams inside. Walls are filler units of glass or brick. The very simplicity of the vocabulary is its strength, for all the buildings regardless of size and shape have a natural unity which is only accentuated by changes in detail. The planting, which shows the variety and richness typical of southern California, has been treated as an integral part of the overall design. In many instances it is carried indoors to become a major decorative element.



SECTION THROUGH FIREPLACE

The major features of the lounge are the fireplace at one end and the planting trellis at the other. The fireplace, framed by large windows, is a cantilever design, open on three sides. Walls are finished in scored plywood, beige in color. General illumination is provided by indirect troughs which intersect the roof beams. The ceiling is painted a dusty green, and the floor is carpeted in a darker green.



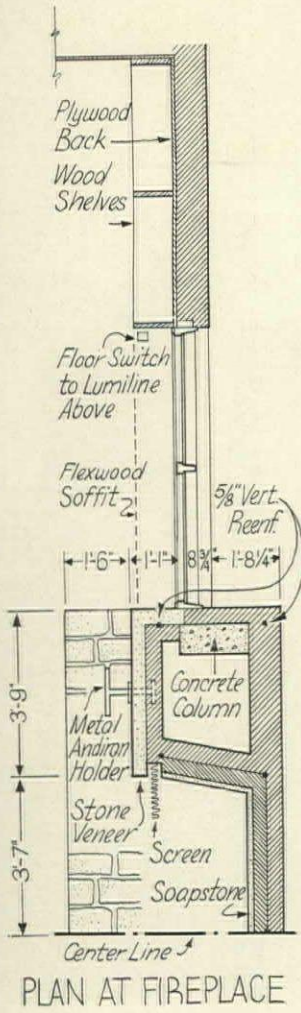
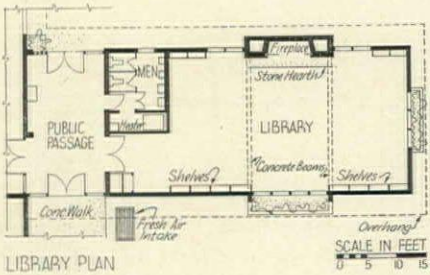
Photos, Maynard L. Parker



MOTION PICTURE COUNTRY HOUSE



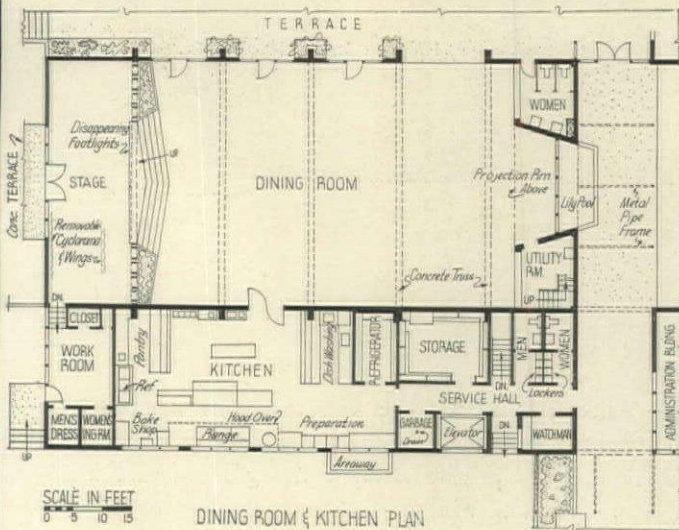
LIBRARY





Photos, Maynard L. Parker

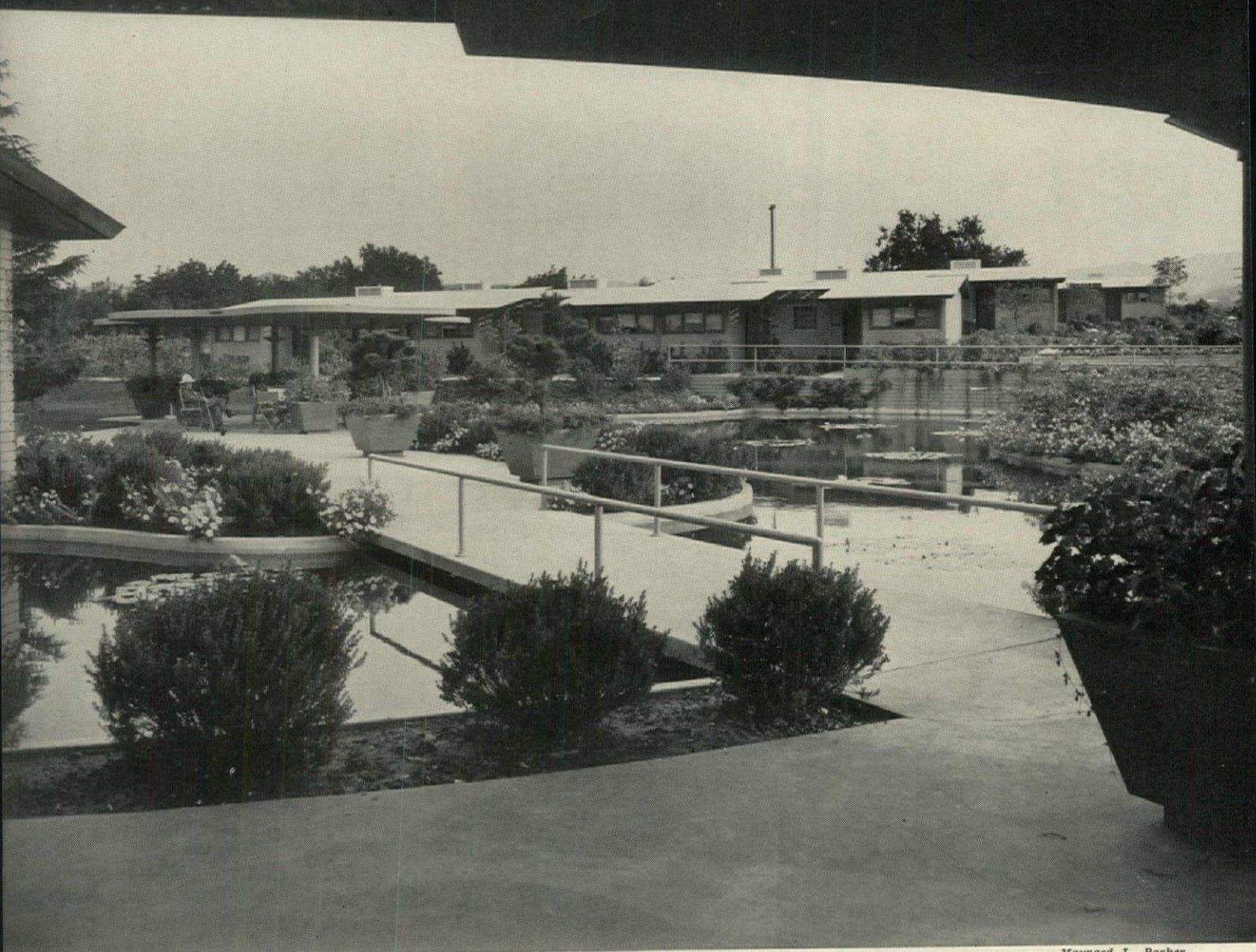
DINING HALL



VIEW TOWARDS STAGE

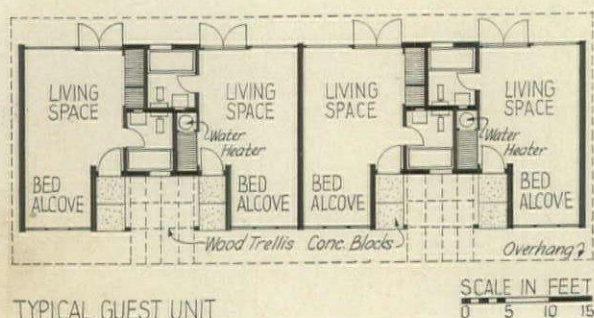


The library is a smaller, more masculine version of the lounge. Here the walls are in walnut and rough stone. The ceiling is a warm yellow and the carpet is dark green. The dining room, which can seat 300 at tables for four, also serves as a theater. This secondary use is only to take care of the community's requirements until a separate theater building can be put up. Colors are green for the walls, a chocolate ceiling and lemon yellow upholstery. The planting trellis is again used in the dining room, this time flanking the stage opening.

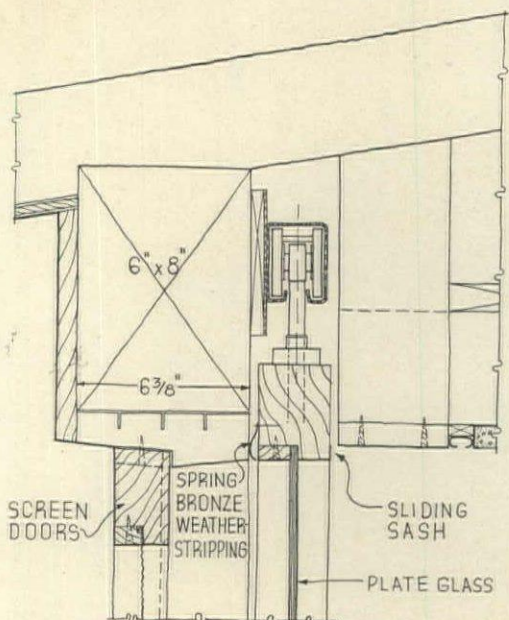


Maynard L. Parker

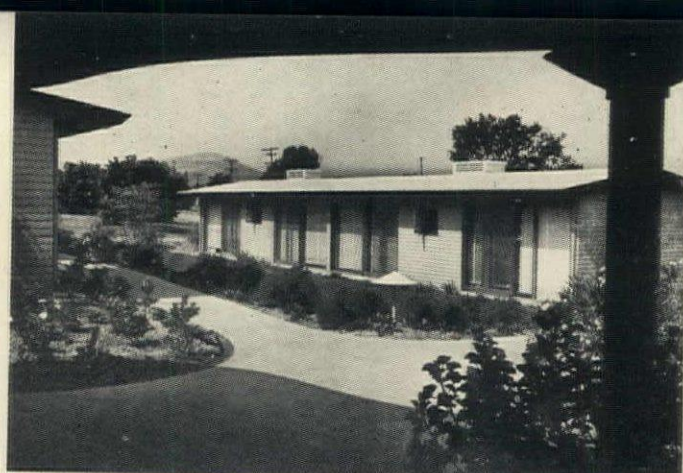
COTTAGES



The cottages reflect a desire to give each resident a complete private apartment rather than a dormitory bedroom. Each unit, therefore, has its private bath, a living room and a sleeping alcove. The south windows extend from floor to ceiling, while those on the north are high. Generous overhangs screen off the sun's rays during the hottest part of the day. Five different color schemes were used for the dwelling units. The use of brick and low-pitched roofs serve to relate these buildings to the larger community structures. It is interesting to observe, in connection with the photograph above, that the somewhat theatrical appearance of the group stems almost entirely from the landscape treatment, as the buildings themselves could hardly be more modest in character. The importance of landscaping as a design factor in group planning has rarely been demonstrated more forcibly.



HEAD SECTION FOR SLIDING SASH



Photos, Maynard L. Parker



Fred R. Dapprich





CONVALESCENT BUILDING

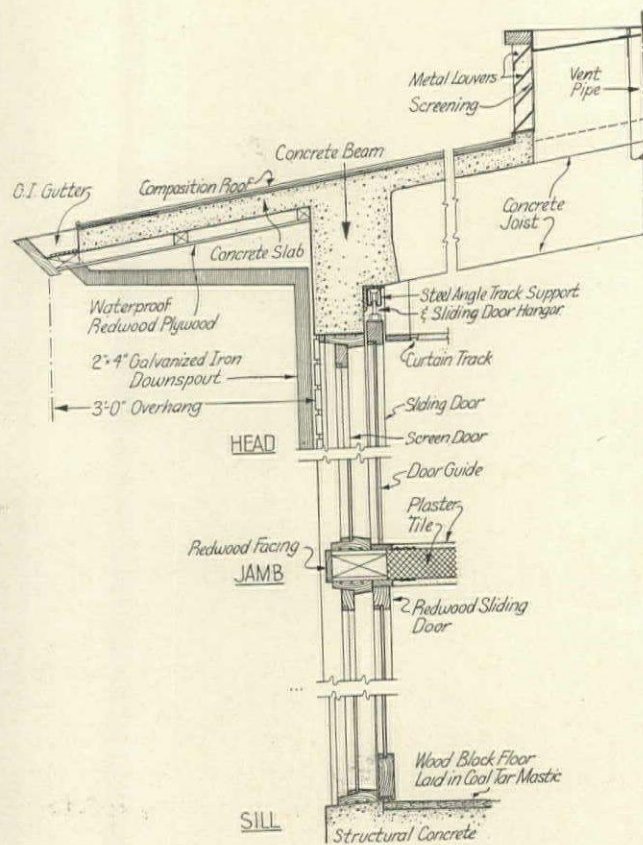
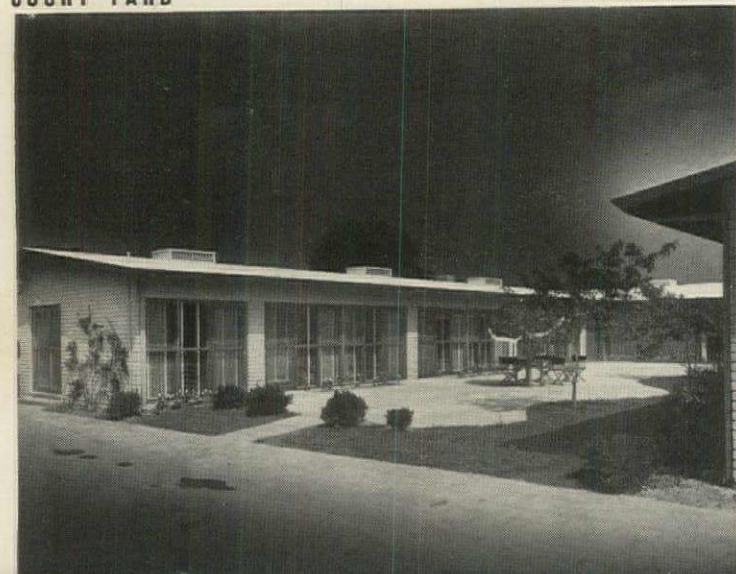
APPROACH

Photos, Fred R. Dapprich

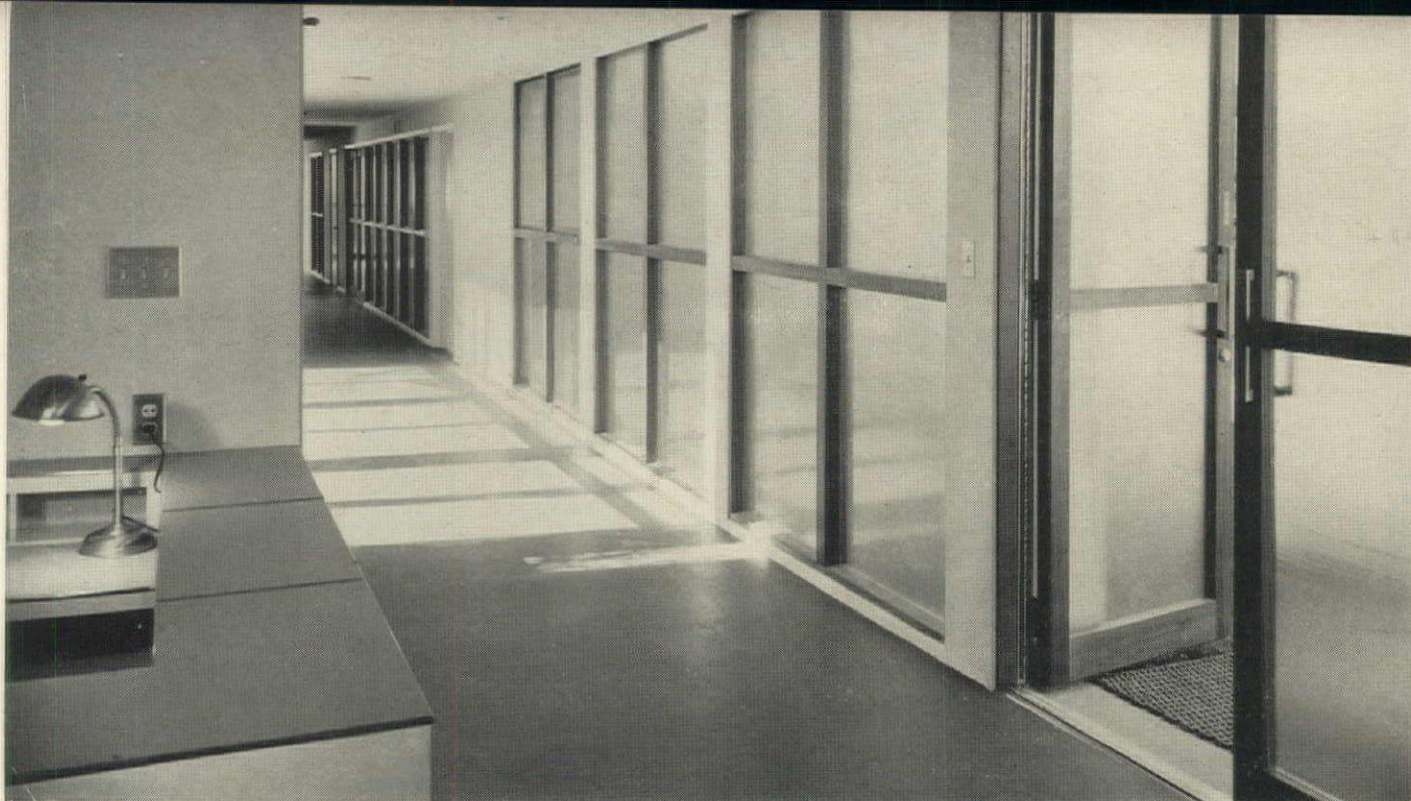


COURT YARD

Maynard L. Parker

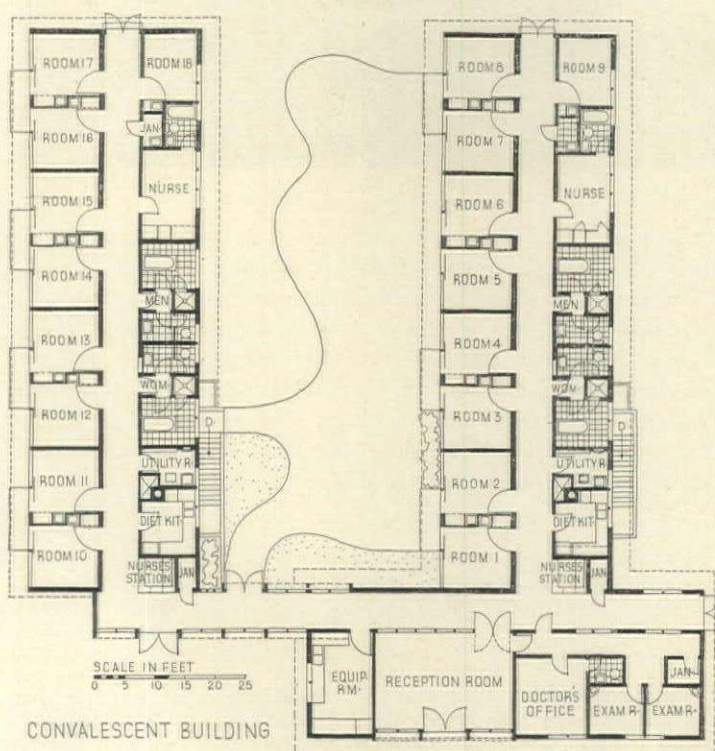


TYPICAL WALL SECTION

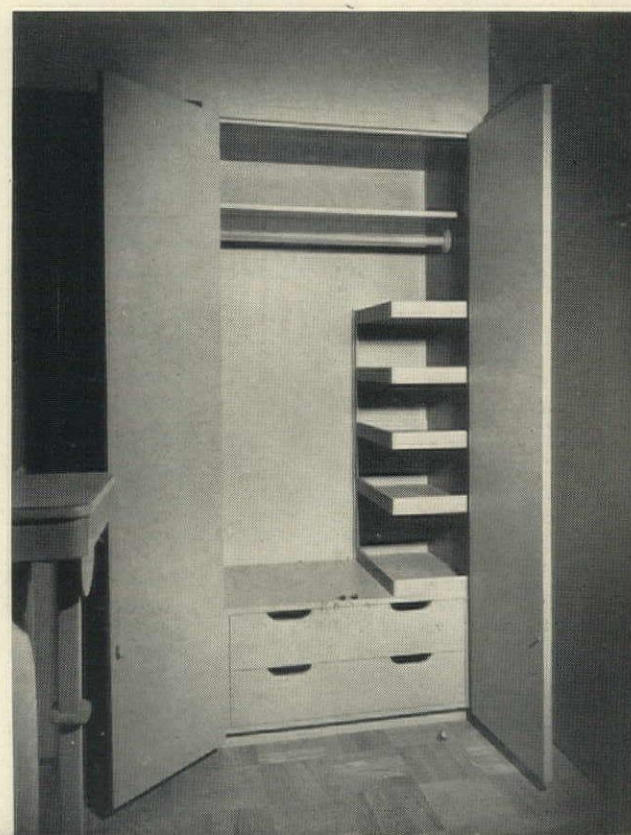


CORRIDOR

Fred R. Dapprich



Photos, Maynard L. Parker

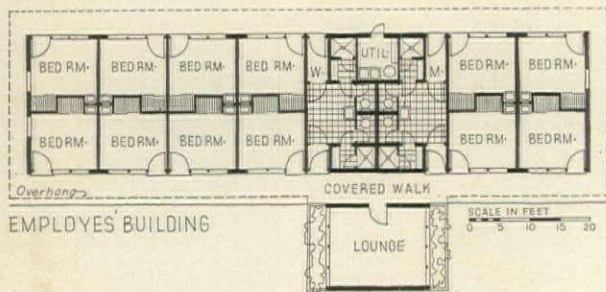


The convalescent building shows a very nice balance between residential and community character, an expression which can be traced directly to the plan. Rooms are arranged in two wings loosely connected to a reception unit, and the plan of each wing gives the patients a good view combined with privacy. Since orientation is the same for all rooms it was possible to develop a completely standardized unit plan, with a bed, lavatory, closet and a large south window. The shelter designed for the main walks appears in two of the illustrations on the facing page. Built of corrugated metal sheets suspended from arches of two-inch steel pipe, it is an inexpensive, ingenious and attractive feature.



EMPLOYES BLDG.

Fred K. Dapprich



The employees' building is a dormitory type of structure which takes advantage of the mild climate to use outside corridors. Each room has its own lavatory; other plumbing facilities are concentrated in a group reached by the outdoor passages. A small lounge, all glass at each end, is located across the passage from the plumbing and utilities unit. By thus separating the lounge from an otherwise standardized building, the architect has simultaneously avoided complicating his plan and construction, and has given added interest to the design.

CONSTRUCTION OUTLINE

FOUNDATION: Reinforced concrete.
STRUCTURE: Exterior walls — reinforced Steeltid Brick Masonry, Davidson Brick Co. Interior partitions — Douglas fir studs, Owens-Parks Lumber Co.; metal studs, Soule Steel Co.; Gold Bond lath, U. S. Gypsum Co.; wire mesh, L. A. Lathing Co.; plaster, U. S. Gypsum Co. and Monolith Co. Structural steel — Ceco Steel Co. Damp-proofing — R. I. W., A. C. Horn Co. Cement — Monolith Cement Co.; strengthening agent — Super Concrete Emulsions, Ltd. Floors — reinforced concrete.
ROOFS: Douglas fir, Owens-Parks Lumber Co. and Hammond Lumber Co. Convalescent bldg. — reinforced concrete. All treated with Tropicool, Tropicool Roofing Co.
SHEET METAL WORK: Columbia Steel Co.
INSULATION: Ceiling — rock wool, Eagle-Picher Sales Co.
WINDOWS: Sash — Deats Mfg. Co. and Pacific Mfg. Co. Glass — Mississippi Glass Co. and Pittsburgh Plate Glass Co.
ELEVATORS: Otis Elevator Co. Doors — California Fireproof Door Co.
FLOOR COVERINGS: Tile — U. S. Quarry Tile Co. and Sparta Ceramic Co. Linoleum — Armstrong Cork Co. Oak block — A. B. Rice Flooring Co. Carpet — Mohawk Carpet Mills, Inc. and Bigelow Sanford Carpet Co.
WALL COVERINGS: Weldtex and Flexwood paneling, U. S. Plywood Co.

FURNISHINGS: Barker Bros., Colson Mfg. Co.; hospital equipment — Carrom Industries, Inc., Hospital Supply Co., Prometheus Co., Shampaine Co.
WOOD AND METAL TRIM: Doors and millwork — Deats Mfg. Co. and Pacific Mfg. Co. Metal trim — Superior Metal Trim Co. Ornamental iron work — Western Ornamental Iron Co., U. S. Steel Co.
HARDWARE: Schlage Lock Co., Norton Lasier Co., Oscar C. Rixson Co., Ceco Steel Products, Sylvester Sash Operators, Inc., Weiser Mfg. Co., Newell & Co., McKinney Mfg. Co. and Kirsch & Judd.
PAINTS: W. P. Fuller & Co., Sherwin-Williams Co. and F. W. Laucks.
ELECTRICAL INSTALLATION: Conduit — Triangle Mfg. Co. Wire — U. S. Rubber Co. Boxes and covers — Appleton Electric Co. Wiring services — Bryant Electric Co. Distribution panels — Trumbull Electric Mfg. Co. Fixtures — Beranek & Erwin. Automatic clock and intercommunicating system — S. H. Couch Mfg. Co.
KITCHEN EQUIPMENT: Ranges — Graham Mfg. Co. Steamer — Gloekler Mfg. Co. Baking oven — C. S. Blodgett Co., Inc. Hot plates — Wolf Mfg. Co. Dishwasher and mixers — Hobart Mfg. Co. Steam table — Dohrmann Hotel Supply Co.
LAUNDRY EQUIPMENT: ABC Mfg. Co. and Iron Rite Ironer Co.

PLUMBING: Fixtures — Crane Co. and Kohler Co. Valves — Walworth Co. and Detroit Brass Co. Pipes — Crane Co., Chase Brass & Copper Co. and Pacific Cast Iron Co. Drains — Josam Mfg. Co. Hangers and fittings — Grinnell Co. Water heaters — General Water Heater Corp. and Burkey Water Heater Co. Septic tanks — N. C. Nottingham Co. Gas regulator — Reliance Regulator Corp. "Air cell" block insulation — Johns-Manville.

HEATING: Gas fired forced air, Payne Furnace Co.; oil fired forced air, Mueller Mfg. Co. Blowers — Western Blower Co. Exhaust system — Utility Fan Co. Grilles — Controlair Mfg. Co. Ducts — H. S. MacClelland Co. Regulators — Minneapolis-Honeywell Regulator Co. Wall heaters — Williams Radiator Co. Oil burners — C. S. Johnson & Co. Grilles — H. N. Pottorff.
SPECIAL EQUIPMENT: Motion picture and stage equipment — International Projector Corp., Strong Mfg. Co., Walker Screen Co., L. A. Stage Lighting Co. and R. L. Grosch & Son.

REFRIGERATION EQUIPMENT: Compressor — Carbondale Div., Worthington Pump & Machinery Corp. Cold storage room — Fiberglas, Owens-Corning Fiberglas Co. Ice cream cabinet — Frigidaire-General Motors Corp. Water coolers — A. B. Taylor Mfg. Co.

THE UTHWATT REPORT*



SIR AUGUSTUS ANDREWES UTHWATT

The searching and revolutionary recommendations on public acquisition of land and national control of its use set forth in this report make it a document of vast importance. The personnel of the Committee, highly respected lawyers and surveyors, add to the report's importance. Public response as reflected in newspaper editorials and a statement by Sir Ernest Simon (included herewith) indicate that Parliament will be under pressure to implement the Uthwatt program. The following extracts and comment are an attempt to summarize the findings as this issue goes to press. Reference to the article on "Planning" in the September 1941 FORUM will prove of interest.

—The Editors

EXTRACTS AND COMMENTS

For 21 months, Mr. Justice Uthwatt and his Expert Committee on Compensation and Betterment labored upon a prodigious assignment from England's Minister of Works and Planning: "To make an objective analysis of the subject of the payment of compensation and recovery of betterment in respect of public control of the use of land." On September 10 last the Committee issued its report. Quickly fumbling through its 180 pages, England's landowners saw their last remaining visions of future unearned increment go glimmering. Only consolation was that private ownership was not yet completely doomed. For while the committee philosophized that "Immediate transfer to public ownership of all land would present the logical solution," it added, "But we have no doubt that land nationalization is not practicable as an immediate measure and we reject it on that ground alone." Although the congested and blighted areas of U.S. cities are not so bad as those in England, and although we may not face the problem of reconstruction of war-destroyed property, no far-seeing American can pass by the thought that our own trend towards central planning may lead to considerable revision of common law rights of property ownership.

*Prepared by the Expert Committee on Compensation and Betterment and presented to Parliament, September 1942, by the Minister of Works and Planning.

COMMENT BY SIR ERNEST SIMON

The Committee which wrote The Uthwatt Report consisted entirely of experts—lawyers and surveyors. The use of land, which is the subject of the Report, is controlled by exceedingly technical legislation and many people feared that the Report would be a technical one dealing with detailed improvements of existing legislation.

Far from it. The Report makes a very wide survey of the whole of the problems connected with the use of the land, urban and rural, and makes bold and original recommendations. There is no doubt that the Report is a milestone in the history of planning and that, if adopted, it will go far to render effective and positive planning possible on a national scale. There are many technical difficulties of valuation and management but the Committee is a highly authoritative one, it spent many months studying the problem and it assures us that these difficulties can be overcome.

While the adoption of The Uthwatt Report would remove one of the many difficulties in the way of effective planning in Britain, there are still other major steps that are required.

It is true that the Government have set up a Ministry of Reconstruction and a Ministry of Works and Planning and this goes far to show that the Government means business. But much is still required to define the powers of the Government planning authorities and also of the local and regional planning authorities. Effective machinery is the first necessity.

National decisions are also necessary on the location of industry. How far is industry to be decentralized? Are the great towns to be prevented from growing further? And, vital decisions must be taken as regards national financial assistance to the local planning authorities.

All these things can be done, and will be done, if there is an insistent public demand.

There will, of course, be political opposition to the drastic reforms that are recommended. Some landlords will no doubt dislike the limitations on their freedom proposed in The Uthwatt Report and may organize opposition. But the growth of public interest has been most encouraging. In the inter-war period the social conscience of the nation woke up to the extent of demanding an enormous number of well-built low-rental houses. The demand was

The Uthwatt recommendations are based on two assumptions:

1. That national planning "will be directed to ensuring that the best use is made of land with a view to securing economic efficiency for the community and well-being for the individual, and that it will be recognized that this involves the subordination to the public good of the personal interests and wishes of landowners. Unreserved acceptance of this conception is vital to a successful reconstruction policy."

2. That there will be a system of national planning "with a high degree of initiation and control by the Central Planning Authority, which will have national as well as local considerations in mind, will base its actions on organized research into the social and economic aspects of the use and development of land, and will have the backing of national financial resources where necessary for a proper execution of its policy." The Authority would have control of all city reconstruction, seeing to it that all local projects fit into a sensible pattern for the whole land. And it would be the sole initiator of all new developments to be built in the future. In this sphere of operation the Committee reached startlingly new concepts.

Biggest problem of large-scale national planning is that new developments cause wide shifts in land values. If owners are to be compensated for loss on one hand, the domain should be able to recoup by receiving offsetting improvement in other values. Although avoiding recommending nationalization of all land, the Committee proposed 1) immediate nationalization of all development rights by purchase for fair compensation in the name of the Authority; 2) all new development to be prohibited unless initiated or approved by the Authority; 3) all land to be used for new development to be acquired at fair value (less "development right") by the Authority and leased to the developer. Of this neat solution the Committee boasted: "... it is a complete solution of the hoary and vexing problem of shifting values ... The scheme will thus facilitate the operation of a positive policy for agriculture, the improvement of road systems and public services, the preservation of beauty spots and coastal areas, the reservation of green belts and National Parks, the control over the expansion of existing towns and cities, the establishment of satellite towns and the planned location of industry in new areas."

To visualize the workings of this scheme, peer into the affairs of William Dodge, owner of a 20-acre farm near Birmingham, mortgaged for £500. As soon as the Authority starts to function it will appraise the potential value of Dodge's development rights—for housing or industrial purposes—and compensate him therefore and receive a permanent assignment of those rights. If the mortgage holder so desires, he can claim part of the compensation just as if part of the land had been sold. If the land had been leased, the lease would continue, but the tenant would be bound by the prohibition against development.

Having sold his development rights, Farmer Dodge still has rights to erect such improvements, or dwellings for his family, as he desires, subject to license from the Authority. But his land is always subject to "call" by the Authority. Perhaps the Authority will decide that it is in the national interest to use the farm as part of a garden city. If Dodge

and the Authority cannot agree on a fair price, the matter will go to arbitration, and Dodge can claim compensation for severance, disturbance or "other injurious affection." Thus if only half of the farm were to be used and the farming value of the other half were thereby reduced, compensation would be paid. Having acquired title to the land, the Authority would lease it to a developer (giving preference to Dodge if he so desired and were responsible), the lease to dictate how the land will be used and to give the Authority right to re-enter on breach of covenant. Although the money received will compensate the Authority for the original purchase of development rights, the Committee makes it plain that "It is implicit in the conception of planning that the management should be directed to forwarding the interests of planning and not with a view to the financial return. The sum paid for the development rights should be regarded as of historical interest only."

Little is said by the Committee of how so grandiose a problem as appraisal of all the development rights of all the undeveloped parcels of land will be solved. The only hint is in these rather indefinite statements: "Our recommendation is that the compensation to be paid should be assessed for the whole country as a single sum . . . the amount of such sum to be determined by reference to that fair value and such sum to be divided among claimants in accordance with the value of development rights attached to their lands . . . In our view it is possible fairly to ascertain the proper amount of the Fund. That such a sum is a matter of estimation and not of arithmetical computation is obvious.

Future economic conditions will be difficult to estimate. But they would have to be estimated in measuring valuations of the development rights attached to individual parcels." Also mentioned by the Committee is the possibility that "in all the circumstances which will obtain after the war" perhaps no compensation should be paid. Originally the Committee proposed to vest in the Authority the right and obligation to rebuild war-damaged areas and areas of such antiquity that reconstruction is in the national interest. It was told that this should best be done by local authorities through additions to present laws. Feeling that "it is essential to secure that the land should not again be divided up among owners of small leaseholds," the Committee recommends that once land is acquired it should be disposed of by way of lease alone. It also recommends that the authorities be given the right of compulsory purchase of land even when no immediate or definite use of the land is in mind.

Most important new concept in this part of the Committee's report is that the domain should be rewarded for the "betterment" caused by development. To do this it is proposed to make a levy on annual increases in site values "taking for the community some fixed portion of the whole of any increase in site values without any attempt at precise analysis of the causes to which it may be due."

This scheme, based on the assumption that the entire community benefits by planned development, calls for immediate appraisal of all property to obtain a base valuation, revaluation every five years, a levy of "say 75%" of any increased value, to be borne by the person actually "enjoying or capable of realizing the increased value," (i.e. a tenant).

strong and persistent and the result was the building of no less than four million good houses in the 20 inter-war years. A magnificent national achievement.

This is a people's war and I believe that the people of Britain intend to make it a people's peace. There is every hope that the Uthwatt Report will be adopted; that this will be only the first step in taking all the necessary action to plan and rebuild Britain in one generation—to preserve the beauties of the countryside; to build fine and noble cities and to provide a pleasant and comfortable house for every family.

NEWSPAPER COMMENTS

"A practical scheme with a great weight of expert authority behind it for making a good job of postwar physical reconstruction . . . A complete scheme for giving effect to a program of reconstruction to which, in broad principle, the Government is committed . . . There are many obvious difficulties which present themselves and a host of technical details which will, no doubt, be the subject of much criticism and controversy, but the broad principles laid down in the Report can scarcely be resisted if the Government is seriously intent upon following out the promises it has made." London SPECTATOR.

"The Uthwatt Committee is hailed here today as having done an inspiring job." CHRISTIAN SCIENCE MONITOR.

"This emphatic declaration of the Government's expert investigators confirms what many unofficial authorities have said and argued for years." London DAILY HERALD.

"A document of fundamental importance . . . an entirely practical plan on which real preparations for postwar reconstruction can be made." London NEW STATESMAN and NATION.



Photos, Robert M. Damora

WAR PLANT

NEMBARD N. CULIN, DESIGNER

STONE & WEBSTER, INC., ENGINEERS & CONSTRUCTORS

This sleek, sizeable structure proudly sporting the joint Army-Navy E-pennant is but a small part—the administration section—of a huge, recently completed plant built specifically for the production of war material. We are not permitted to divulge its exact location, the nature of the product, the size of the manufacturing area nor much other information—such as plans and construction details,—which would undoubtedly be of interest but, unfortunately, might also interest the enemy. The material we present, however, should make clear that this plant is the last word in industrial building design and construction, suitable in every way to the up-to-the-minute manufacturing operations it houses. The administration building is shown on the next three pages, the manufacturing area on the three pages following.



ADMINISTRATION BUILDING

Credit for one of the handsomest industrial-building facades in the current crop of war plants goes to a young (34), comparatively unknown designer, Nembhard N. Culin, employed by the manufacturer as Architectural Design Supervisor. Culin, who was thoroughly familiar with all of the functional requirements of the process, has produced a beauty that is much more than skin deep. The fenestration of the administration building, for example, with its attractive combined use of clear glass and glass block, was worked out to give the best possible outlook and lighting for the company's extensive general offices, while conserving heat and "cold" in the air-conditioned building. The impressive main entrance, opening on the reception room shown at the right, is protected by a sloping marquee cantilevered from a single central support sheathed in cyprus. Glass block surrounding the tempered-glass entrance doors is of the new clear type, also used in the vertical panels lighting the stairwells near each end of the building.

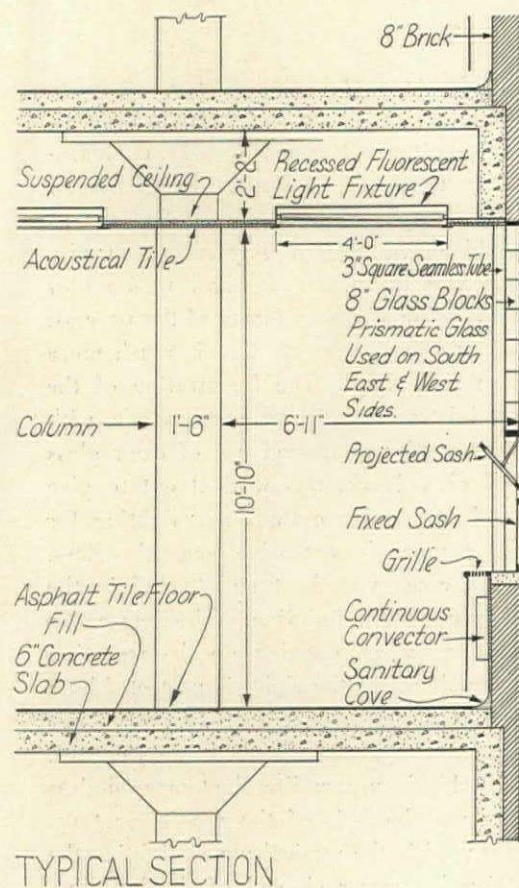
RECEPTION ROOM





GENERAL OFFICE

The general offices, despite their 60 ft. wall-to-wall width, receive excellent daylight through the high, continuous glass block panels which top the windows and extend to the ceiling. To prevent glare and provide better light distribution, light-directional blocks are used in these panels on the south, east and west sides. Walls are cantilevered from mushroom-type concrete columns 24 ft. on centers (detail, right). Since the building is air conditioned, only the upper portion of the clear glass windows is operable, with projected sash opening into the building primarily for easy cleaning from the inside. The lower, fixed light is set 3 ft. off the floor to provide outlook for a seated worker, while the upper light is about at eye-level when standing. Recessed, lens-type fluorescent lighting fixtures are 6 ft. on centers and 4 ft. apart longitudinally, for flexibility in locating office partitions. In those spaces where higher intensity is required, lighting fixtures are set in continuous rows.



The administration building of the huge plant contains many services — such as a blue-print room, hospital, research laboratory and design department — scaled to the needs of a small city. Shown here is the supervisors' dining room (right) and plant cafeteria (below). Following the practice common to so many recently built plants, most of these service areas are located in a three-story wing which connects the office section with the manufacturing area. Owing to the inclination of the site, the latter is at the level of the basement of the administration building, an arrangement which gives increased control over circulation. Tables used in the cafeteria were worked out by the designer, and consist of an ingenious arrangement of laminated strips in which legs and top interlock to form rigid corners secured with a single dowel.



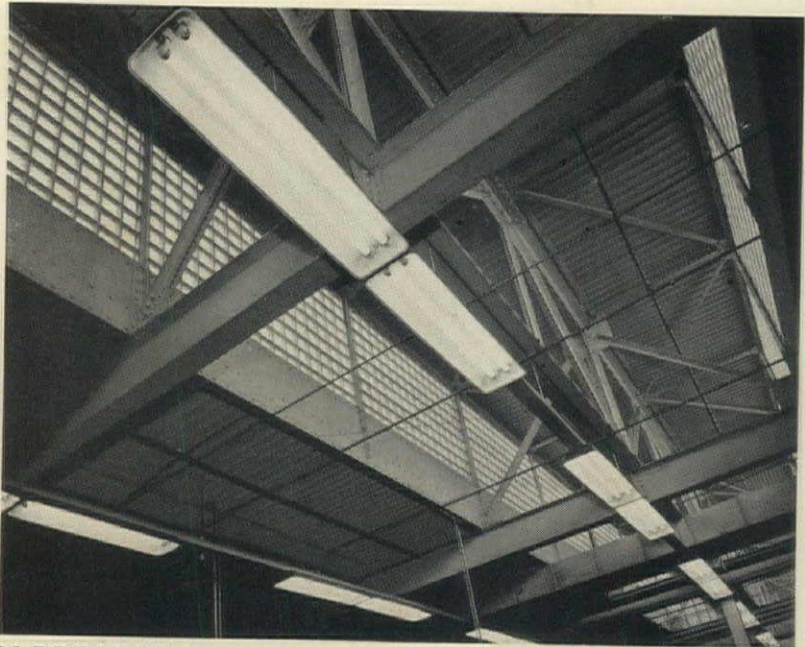
DINING ROOM

CAFETERIA

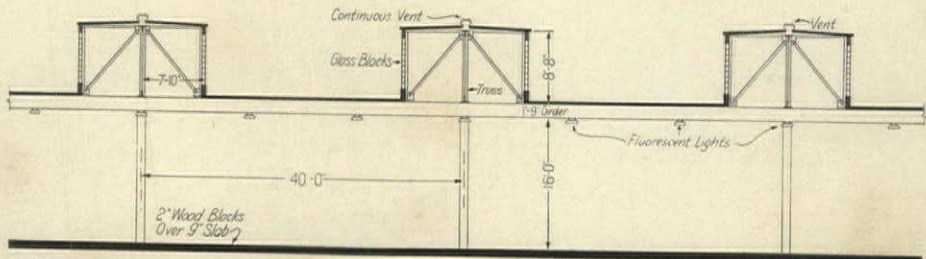




The manufacturing portion, which is partially air conditioned, consists of a huge, single-story area illuminated by glass-block monitors. Bays are 40 by 80 ft., with longitudinal trusses placed at the center of the monitors and continuous level beams hung from the bottom of the open-trusses (typical section, right). Toilet and locker rooms, which are distributed throughout the plant at convenient points, are of the "flying" type, clear of the factory floor, and extend upward into the monitors. A public address system is provided throughout the plant and administration building, used for announcements and paging. It may also be used for musical programs. The plant foundry and pattern-making shop are located in a separate building, served by a common service drive alongside the plant proper (shown in the picture on the next page), as are other special buildings such as the garage and boiler house.



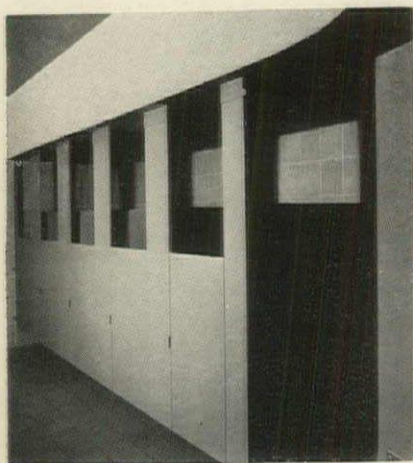
CLERESTORY



TYPICAL SECTION

FACTORY





Toilet partitions throughout the plant and administration building are hung from above, leaving the floor entirely free from obstructions for mopping.

CONSTRUCTION OUTLINE*

FOUNDATION: Reenforced concrete.

STRUCTURE: Exterior walls—face brick, Hanley Brick Co.; inside—movable metal partitions—E. F. Hauserman Co. Structural steel—American Bridge Co. and Lehigh Structural Steel. Floors—reenforced concrete and wood block, Southern Wood Preservative Co.

ROOF: Celotex Corp. insulation, built-up tar and gravel, The Barrett Co.

SHEET METAL WORK: Flashing—copper. Ducts—galvanized iron.

WINDOWS: Sash—Crittall-Federal, Inc. and Truscon Steel Co. Glass—Libbey-Owens-Ford Glass Co. Glass blocks—Owens-Illinois Glass Co.

STAIRS AND ELEVATORS: Stairs—steel. Elevators—Atlantic Elevator Co.

FLOOR COVERINGS: Asphalt tile, linoleum

and Linotile, Armstrong Cork Co.

WOOD AND METAL TRIM: Trim—E. F. Hauserman Co. Doors—J. S. Thorn and Superior Steel Door & Trim Co., Inc. Special doors—Cornell Iron Works and Richard-Wilcox Mfg. Co.

HARDWARE: Russell & Erwin Mfg. Co. and Yale & Towne.

PAINTS: Pittsburgh Plate Glass Co., Devoe & Reynolds Co., Inc. and L. Sonneborn Sons, Inc.

PLUMBING: Fixtures—American Radiator-Standard Sanitary Corp. Soil pipes—cast iron. Waste and vent pipes—galvanized iron. Water pipes—brass.

HEATING AND AIR CONDITIONING: Steam and circulation hot water system. Air conditioning—Carrier Corp. Boiler—Titusville Iron Works Co. Regulators—Johnson Service Co.

* This is only a partial list of outstanding products used on this plant

2 BLOOD BANKS

SAN FRANCISCO, CALIFORNIA

HONOLULU, HAWAII

Scientific discoveries which have made it possible to separate the plasma from the blood, to store it indefinitely, and to administer it regardless of the blood types of recipient and donor, have produced a need for a whole new series of building types: donor centers, blood grouping and serology laboratories, and plasma processing laboratories. In some instances these functions are housed under the same roof, in others they are taken care of in separate buildings. Most of the new donor centers occupy existing structures, but occasionally, as in Honolulu, a special building is erected. With the recent increase in the Blood Procurement Program, there will be need for new centers in all parts of the country. For architects not already engaged in military activity this need presents an opportunity for a direct and important contribution to the war effort. Incidentally, it will demonstrate to large numbers of people the value of professional planning services.

BLEEDING UNIT

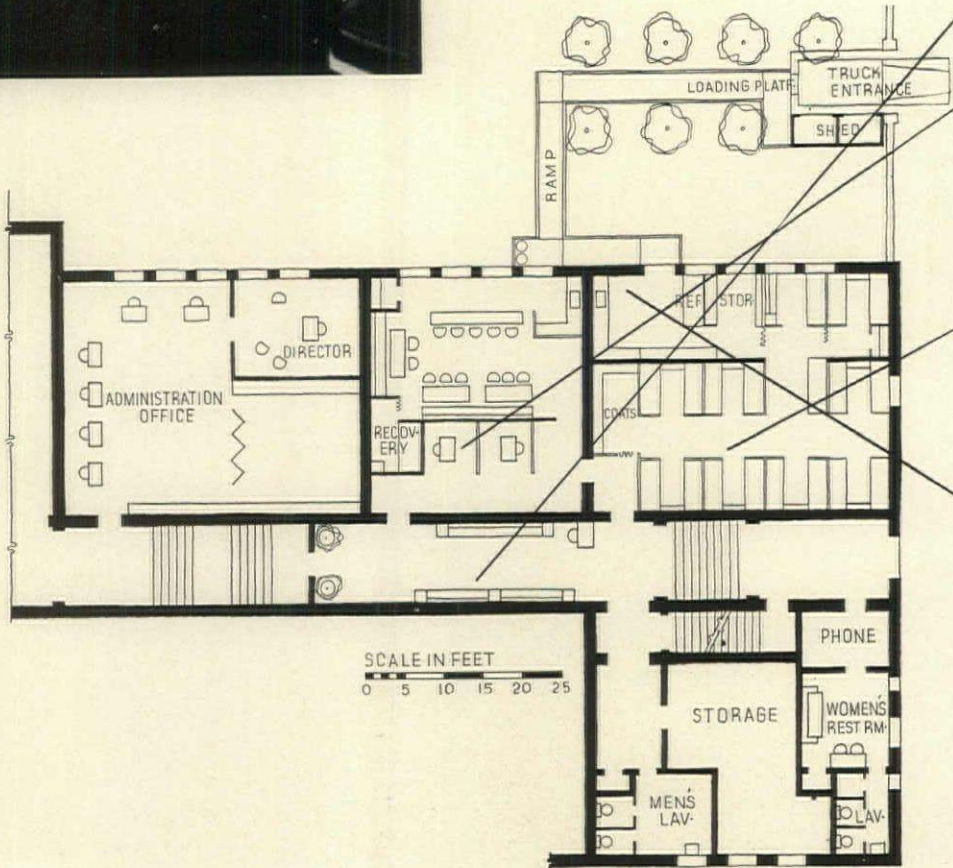
Photos, Roger Sturtevant





CANTEEN

The San Francisco Blood Procurement Center of the Red Cross is a conversion job, using space donated by the California School of Fine Arts. The area taken over is divided by thick concrete walls and the plan, in consequence, had to be arranged within the existing spaces. As originally set up, the Center was to handle 2,000 donors a week, but with the increase in the program this number was increased to 3,500. Fortunately the plan had been arranged most efficiently, and the increased load was handled so successfully that the Center was awarded the Army-Navy "E" for its work. The present schedule calls for 40 donors an hour, using 16 tables. In addition there are two mobile units which operate out of the Center, taking care of the surrounding rural areas. The working of the Center is divided into three major functions: administration, technical (handling of the donors from time of arrival until they have given their blood), and the canteen. Blood is stored in portable refrigerators which are moved by truck to the processing laboratory.



BLOOD BANK AT SAN FRANCISCO, CALIF.



RECEPTION

EXAMINATION



BLEEDING UNITS



SHIPPING



The photographs above show the operations in their relationship to the plan. The donor arrives at the reception room, and waits until called. In the examination room the donor registers and is tested for temperature and hemoglobin. The next stop is at the bleeding table. These tables are built on a slight incline, to prevent the blood from leaving the upper part of the body during the operation. A "recovery room" is reserved for those who need more than the normal rest period of ten minutes after bleeding. A canteen, shown on the opposite page, serves doughnuts and coffee or tea.

All construction in the Center is of exposed studs and fir plywood. Colors are white (walls and ceilings), red (the large crosses on various walls), and blue (linoleum counter tops and furniture upholstery).

C. W. DICKEY, ASSOCIATES, ARCHITECTS

ARCHITECTS:

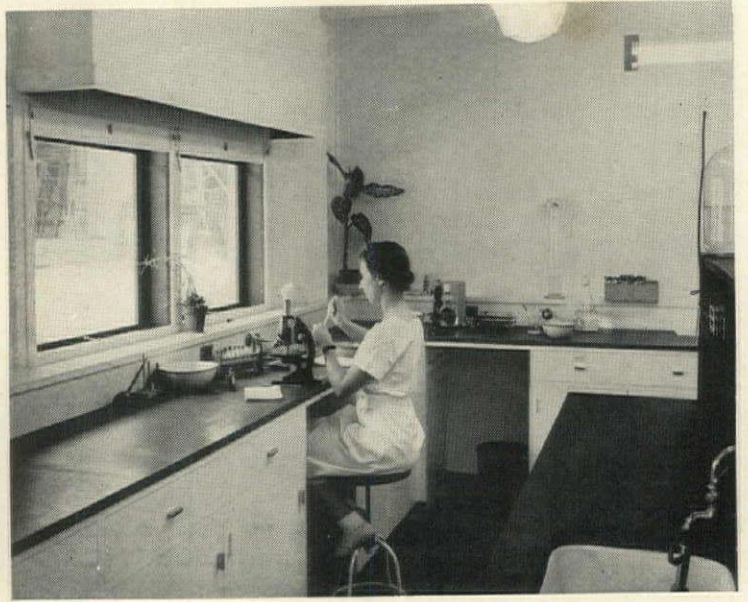
WILLIAM DICKEY MERRILL

JAMES C. SIMMS

KENNETH W. ROEHRIG

The Honolulu Blood-Plasma Bank was opened last July. It is of temporary construction, with critical materials eliminated wherever possible. Unlike the San Francisco Center it is a complete unit, not only handling the donors of blood, but processing the plasma as well. It also differs from the previous example in that it is operated by the Territorial Office of Civilian Defense instead of the Red Cross.

The building contains the three main services already listed in connection with the San Francisco Center: administration, blood drawing and canteen. In addition it has complete laboratories for treatment of the plasma and the cleaning and sterilizing of equipment. One of the more interesting features is shown in the photograph below and the large-scale detail drawing. Each window has a blackout hood and sliding wood panel which provide air without light leakage. An important part of this scheme is the roof overhang, which absorbs whatever light might pass through the light trap.

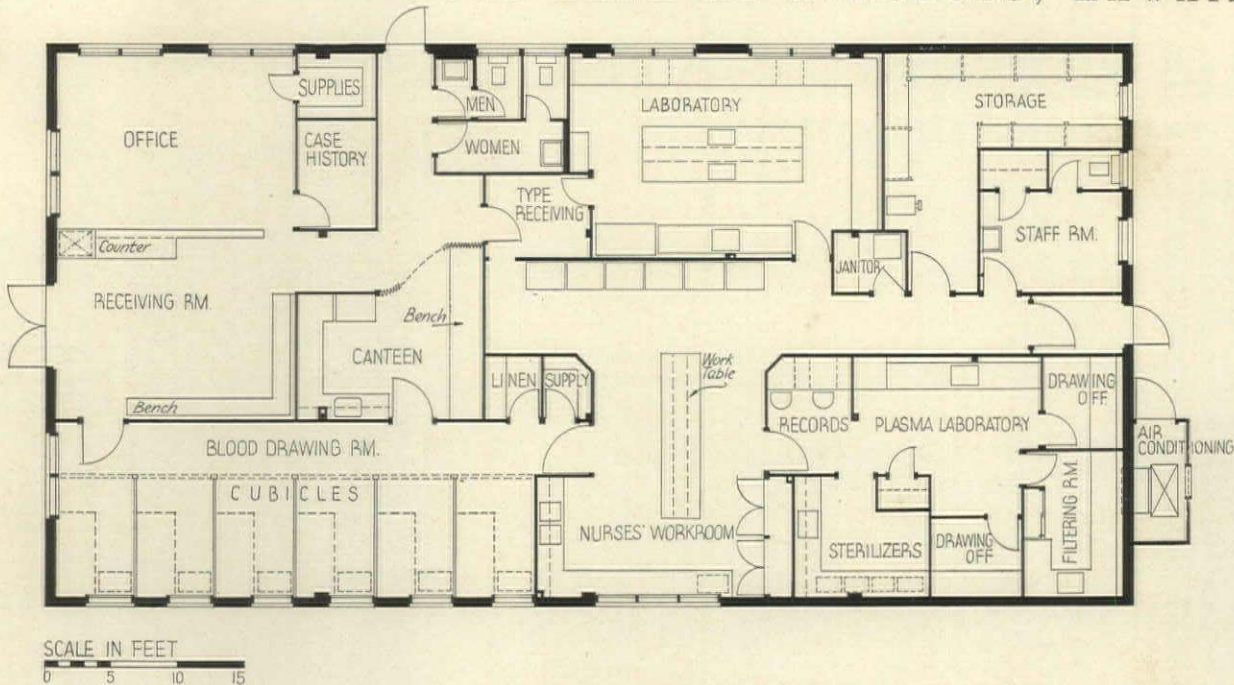


LABORATORY

BLEEDING UNITS



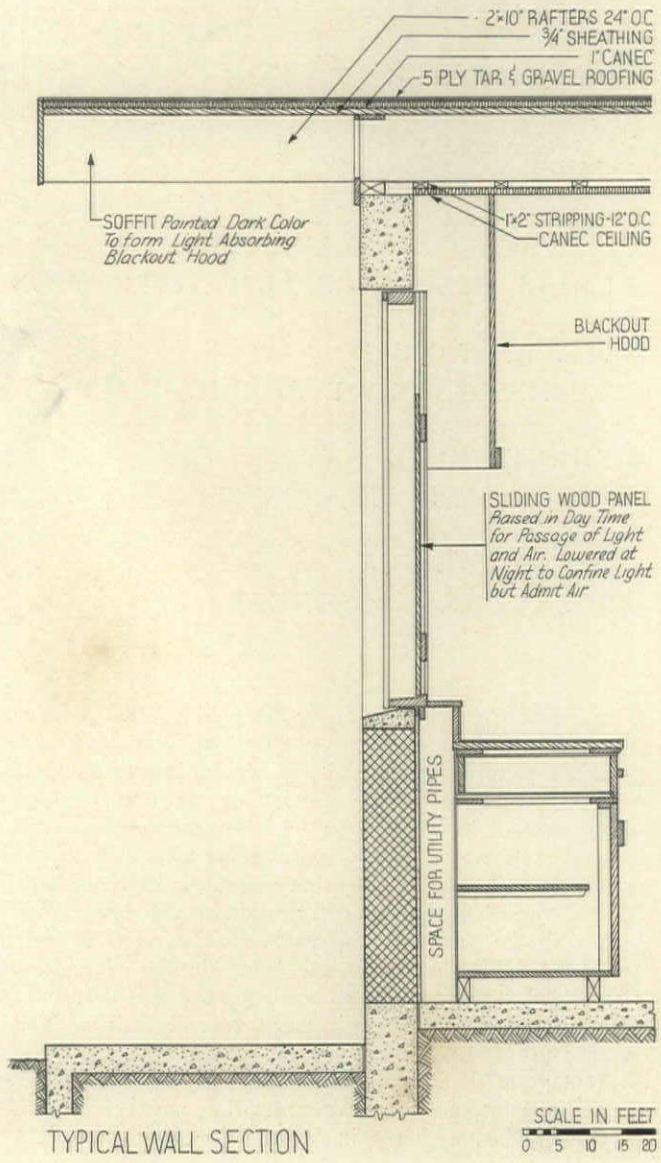
BLOOD BANK AT HONOLULU, HAWAII



CONTRACTORS:
PACIFIC CONSTRUCTION CO.

The receiving room is flanked on one side by the office and on the other by the cubicles. The nurses' workroom is used for the cleaning and preparation of equipment, and is readily accessible from both cubicles and the refrigerators where the blood is stored. It will be noted that the areas used by the public—cubicles, canteen and reception room—form a separate unit within the building. There is no danger, with this plan, of any overlapping of the activities of the public and the laboratory staff. A view of the small canteen, with the cubicles beyond, is shown in the illustration directly below.

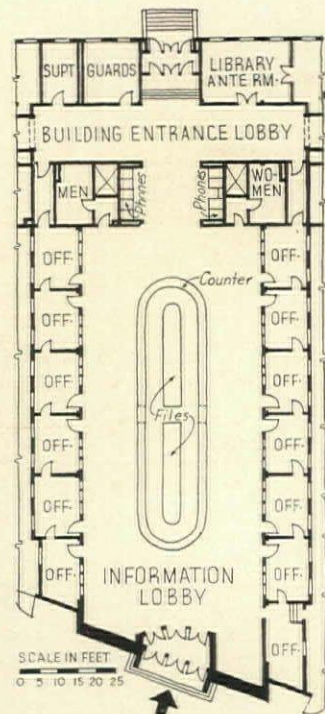
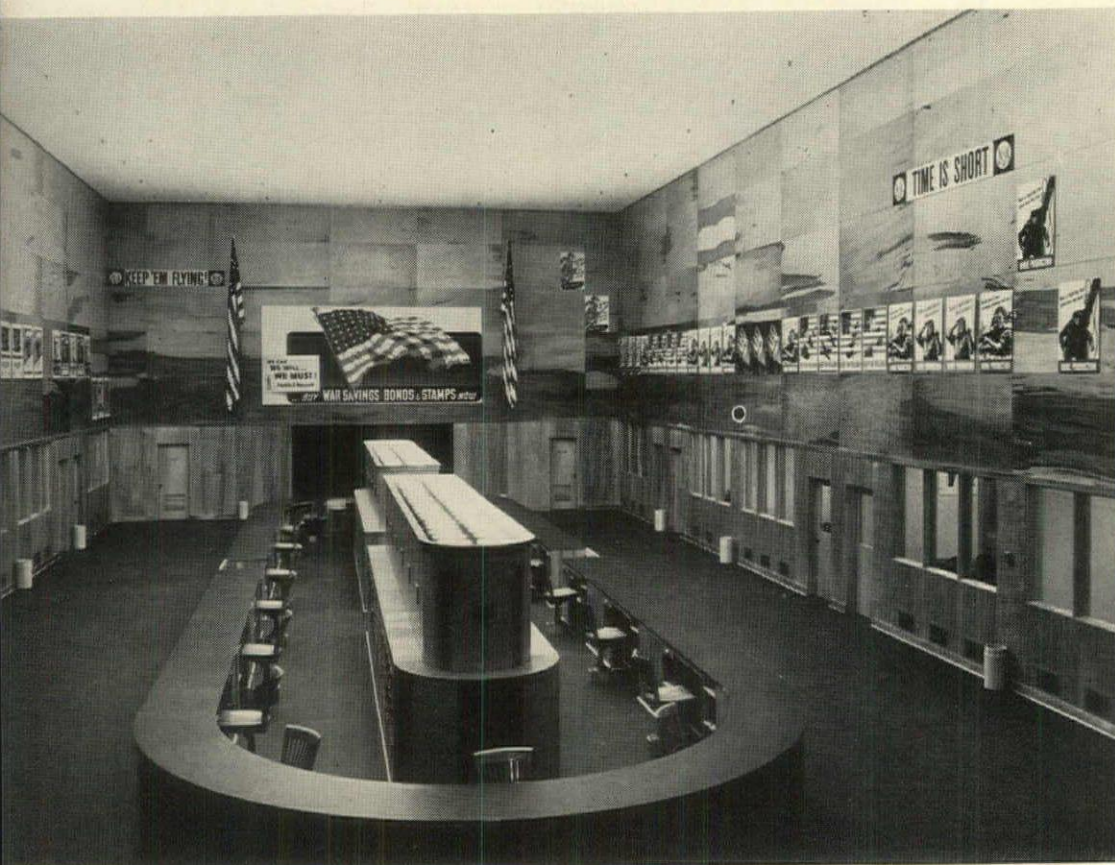
CANTEEN



INFORMATION CENTER

OFFICE OF WAR INFORMATION

WASHINGTON, D. C.



CHARLES H. TOMPKINS CO.,
CONSTRUCTING ENGINEERS

FEDERAL WORKS AGENCY . . .
PUBLIC BUILDINGS ADMINISTRATION

W. E. REYNOLDS
COMMISSIONER OF PUBLIC BUILDINGS

GEORGE HOWE
SUPERVISING ARCHITECT

NEAL A. MELICK
SUPERVISING ENGINEER



Rent



Opened as a clearing house for the public seeking information on the Government, the Office of War Information (middle picture, left) and its handsome information lobby (above) is typical of the many temporary structures now being erected in Washington for emergency purposes. The official architecture of the capital being what it is, it is all the more refreshing to note that war needs have resulted in a shift towards such clean-cut, straightforward design. While many of the errors of the past—such as land crowding, cramped light courts, etc—are being duplicated and even intensified, it may not be too much to hope that the contrast between these “temporary” structures and their multi-columned predecessors may some day be interpreted to the disadvantage of the latter. If this happens despite the faults which remain, and the cheaper materials now being used, it should produce a change in design policy long overdue.

BOMBED BRITISH BUILDINGS



British Combine

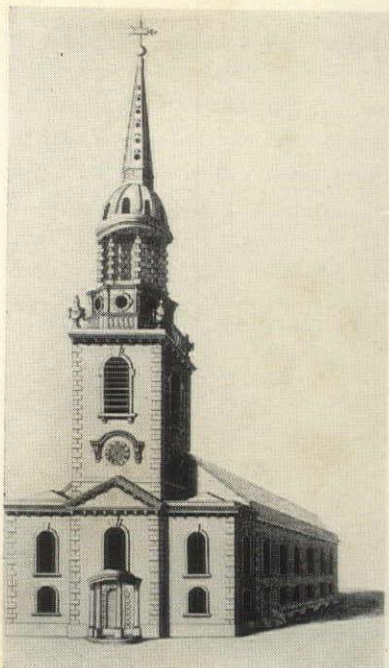
A big 18th century home, practically rebuilt by John Nash in 1825-30 to make it into a Palace. The result was not satisfactory, and a new front was designed by Edward Blore in 1847. In 1913 the whole Palace was re-modeled once more by Aston Webb. The damage has been chiefly to the chapel and to the garden entry, part of Nash's original work.

It is well over a year since the last of the great Nazi air fleets attempted to bomb Britain into submission. These photographs show some of the wreckage they left behind them. Recently sent to this country as an exhibition, and published in book form (see page 12), this material makes no pretense of being the picture of a country at war: it is merely a visual directory of buildings considered important for reasons of design or historical association, which have been damaged or destroyed by German bombs. Since this directory includes some of the masterpieces of English architecture, it would have been possible to exaggerate the cultural loss to the nation out of all true proportion. Fortunately, nothing of the sort has been done, and the reason is most significant. To the fighting citizenry of England these broken masses of brick and stone already belong to history. The new London, the new Coventry, the new England belong to the future. And the future of Britain still belongs to the English people.



Rischgitz





Keystone

ST. MARY'S ISLINGTON Built in the middle of the 18th century on the site of an earlier church, the architect Lancelot Dowbiggin, a carpenter, designed a plain church with a steeple of considerable richness, inspired by the work of the elder Dance. The roof of the nave, an engraving of which appears in one of the contemporary carpenters' textbooks, was a fine piece of carpentry.

LAMBETH PALACE LIBRARY Originally the Great Hall where Archbishops dined, this is a curious specimen of Gothic built out of its time. Although in process in 1663, it is reminiscent of the "Gothic Revival" of an earlier day, and a distinct Laudian taste is represented in this last flourish of hammer-beams, spandrels and pendants. It is clear that the carpenter took Westminster Hall as his model, building on a smaller scale and adorning his structure with classical mouldings.

Illustrations and material for captions on these pages were collected and arranged as an exhibit by four English societies: The Society for the Protection of Ancient Buildings, The Ecclesiological Society, The Art-Workers Guild and The London Society. The aim of the exhibit, as officially stated "was not to lament over what had been lost, but to indicate what can and should be done to save what remains of our architectural heritage."

First U. S. exhibit was held last month at the Architectural League of New York. Those interested in showing this material may get in touch with the Exhibition Section of the British Information Services, 30 Rockefeller Center, New York City.



British Combine



N. Y. Times



Rischgitz

ST. GEORGE'S CATHEDRAL by Augustus Welley Pugin. The loss of buildings of the Middle Ages and the Wren period has overshadowed the damage to architecture of the last two centuries. St. George, one of the most important specimens of Victorian neo-medievalism, was designed by the pioneer of revived Gothic and built in 1840-8. Although adhering closely to 14th century precedent, Pugin's decorative talent was evident in the altarpieces and in the glass, much of which was from his own cartoons.



Planet

PUMP COURT (The Temple) An oblong brick courtyard with a cloister at one end, designed by Wren. Built about 1675 for the lawyers of the Temple, each house comprised several sets of chambers. They continued to be used as lawyers' offices and residences until their destruction. A few of the buildings survive intact and are still in use, but the cloister and the whole of one side have been burnt out.



British Combine



British Combine

GUILDHALL Originally built between 1411 and 1435, but seriously damaged in the fire of 1666. Wren restored it and gave it a flat ceiling. In 1789 the younger Dance added a Gothic facade. In 1866-70, Sir Horace Jones, the City architect, recast the whole building. It is chiefly this work which has suffered. The medieval fragments of the Hall survived the fire of 1940 as bravely as they did that of 1666.



Photos, British Combine



BUILDING'S POSTWAR PATTERN

Action of the City of New York in appropriating \$22 million to complete plans and specifications for \$628 millions worth of construction to be started immediately following the war prompted THE ARCHITECTURAL FORUM to query the Governors of the states and Mayors of all cities over 100,000 population regarding steps taken in programming postwar work. A tabulation of these reports appears on the following two pages. In numerous cases failure of Congress to appropriate additional funds for the National Resources Planning Board and the Federal Work Reserve has limited or stopped progress. This is in marked contrast to the situation in England where Postwar Planning is an accepted national responsibility, adequately financed, and proceeding now.

... Generally I am in agreement with a compilation of such public works programs and at the state level shortly I will have a report from the State Planning Council containing a six-year program of public works, that is, beginning with the biennium 1943-45—drawn up in relation to the state's financial abilities. More than likely the public works having priorities for construction in the biennium 1943-45 will be deferred, except in emergency cases, until after the war, but possibly steps will be taken not only to have plans and specifications prepared but also to accumulate funds in some form for the day when the construction is ready to proceed.

GOVERNOR ARTHUR B. LANGLEIE
Washington

... Virginia has a Planning Commission which is giving consideration to postwar projects. We do not propose to start any of the projects until after the war.

GOVERNOR COLGATE W. DARDEN, JR.
Virginia

... To supplement private industry in providing employment in times of labor surplus, an extensive program of economically sound public works has been prepared to meet anticipated needs of the State and its communities. This program includes projects of many types, such as public buildings for administration, education, or institutional treatment, highways, recreational developments, reforestation, and proposals for mine sealing and drainage, stream pollution abatement, etc. Naturally this program must be tentative, subject to revision and priority, depending upon the changing needs and conditions. Wherever possible, the projects will be self-liquidating or, as in the case of reforestation, will ultimately provide new and permanent employment opportunities. Some projects have received legislative approval, enabling construction to start when the war has ended; others have not yet received legislative approval; and some, such as where the war's concentration of workers in an industrial area has created acute conditions, may be unable to await the end of the war.

... Public works, however, is only one (and, at best, a supplementary) phase of Pennsylvania's preparations to meet economic changes which will follow the end of the war. To assist various localities or regions attain a better balance and diversity in industry, greater employment security, and economic stability, our Department of Commerce has

initiated a program of Community Self-Appraisal, based on the home-rule principle of local determination. Approximately 100 communities have undertaken such self-appraisals, in one or more phases. This requires local fact-finding of the community's needs, capacities and abilities, analysis of the facts discovered, and action to develop the community's resources of labor, raw materials and location in order to foster industries best suited to the individual advantages of the community.

... Through analysis of these local facts, each community may know in advance which industries may close at the end of the war, which ones must convert to peace-time production, and what new industries have the best chance of prospering because of local markets, local raw materials, and local skilled labor. Through such advance knowledge and preparation to diversify the industrial character of the community, it becomes possible to cushion postwar chances and to make it more certain there will be jobs for American soldiers when they come back and for civilians during the war-to-peace transition period.

GOVERNOR ARTHUR H. JAMES
Pennsylvania

... An analysis was made of the available revenues and a determination reached that approximately \$600,000 would be available for each biennial appropriation period. The projects approved came within this limit, excluding the various items of equipment under the sum of \$5,000 each, and the 1941 legislature made an appropriation to cover them for the current biennium. The program contemplates that just previous to each session of the legislature the plan is to be brought up-to-date, adding an additional two years' projects.

ROY H. MILLS, Sec'y. to
GOVERNOR CHARLES A. SPRAGUE
Oregon

... We have programmed and authorized the design of twelve specific projects. These projects are being designed wholly by the State Division of Architecture.

HOLDEN A. EVANS, JR. Exec. Sec'y. to
GOVERNOR HERBERT H. LEHMAN
New York

... The functions of the State Planning Board are under the Publicity and Industrial Development Commission. We have an outline of proposed postwar construction projects in

excess of \$6,000,000, of which part of the funds are available.

ELIAS J. STRONG, Sec'y. to
GOVERNOR HERBERT B. MAW
Utah

... Practically each one of our 640 incorporated towns and 254 counties have postwar programs in various stages of development, many of these being advanced to the point of having plans and specifications prepared.

ERNEST J. BOYETT, Exec. Sec'y. to
GOVERNOR COKE STEVENSON
Texas

... New Hampshire does have a planning and development commission, whose work it is to handle all postwar projects. The Commission is working on a Capital Budget to be presented to the 1943 Legislature that may be classified as a plan for such work. It is also working out a plan for community and municipal reserve financing, anticipating the day the war will come to an end and a number of public works will have to absorb potentially unemployed people. The designing and specifications of a number of buildings under the Capital Budget have been undertaken.

THORSTEN V. KALLJARVI, Exec. Director
New Hampshire

... Planning Board has been designated by Governor Edison as the coordinating agency for the projects to be submitted by all State departments and agencies. The Board to date has reviewed some \$15,000,000 in projects.

JOHN E. SLOANE, Vice Chairman
New Jersey State Planning Board

... Governor Carville has instructed his Planning Board some months ago to prepare the program of postwar construction activities. Some of the projects have reached the design stage. Highway projects have been listed and a great many of them have been designed and would be ready for advertising for bids within say—a month or six weeks after the emergency. We have programmed for improvement in the postwar period, new facilities at the Mental Diseases Hospital, State Prison, the Industrial School, the State Capitol Building, the Supreme Court Building and several structures at the University of Nevada.

ROBERT A. ALLEN
Chairman, Nevada State Planning Board

... The State Planning Commission is preparing a Plan for State Departments and Institutions. This plan will be specifically a recommended list of meritorious capital improvement projects for construction when and if money is appropriated therefor and materials are available.

GOVERNOR FRANK M. DIXON
Alabama

... The Maine Development Commission is doing a great deal of work along these lines. While the works have not progressed far enough as yet to approximate total estimated costs, the designing of them is proceeding now.

GOVERNOR SUMNER SEWALL
Maine

... We have a State Planning Commission which is devoting part of its time to post-war problems. This program is now being reviewed for administrative guidance for war and postwar programs.

GOVERNOR HERBERT R. O'CONOR
Maryland

... We desire to be prepared for the time when industrial activity caused by the War slackens, and for this eventuality projects of permanent usefulness and economic value have been outlined. The original report of the Planning Board deals largely with needed construction at state institutions, and outlines a program that can be financed with state funds without an increase in the present forms and rates of taxation.

GOVERNOR SAM C. FORD
Montana

... Our Program Committee emphatically believes that the employment problem after the war, necessarily has to be met by private enterprise, if private enterprise is to have any excuse for its continued existence. We do not deny the importance of the public projects, but feel it is essential to emphasize that they cannot be the mainstay of post-war employment.

JAMES W. CULLITON, Assistant Director
Committee on Post-War Readjustment
Boston

... The State of Louisiana has, under the Department of Public Works, a State Planning Section. This section is at present actively engaged in the development of projects for the immediate future as well as post-war projects.

DEWITT L. PYBURN, Director
Department of Public Works, *Louisiana*

... My administration is tremendously concerned with what is to happen when the war is over. Because we have lacked any adequate machinery our endeavors thus far have been based more upon instinct than on scientific logic. ... The members of our Planning Commission would likely do a good job if given a chance, but in view of an inadequate subsidy they are satisfied to sign their names to an occasional plat and let it go at that ... I have found that the average citizen doesn't understand or care very much about plans and programs but he can be taught.

MAYOR HARRY P. CAIN
Tacoma, Wash.

POSTWAR SURVEY — STATES

STATE	PLANNING COMMISSION	SPECIFIC PROJECTS OR APPROPRIATIONS	DESIGNS AND SPECIFICATIONS PROCEEDING	TO START BEFORE WAR'S END?
ALABAMA	Yes — 6-year Capital Improvement Plan	\$23,201,422 (excluding highways)	Yes	Depends on the appropriations
ARKANSAS	Yes	Cannot be made known until January, 1943	No	Depends on Legislative authority.
CONNECTICUT	Yes	Report from Governor's Committee pending	Not in near future	After the war
FLORIDA	State Planning Board	No		
GEORGIA	Yes	No	Gathering material and information	
IOWA	No	Approximately \$3 million under consideration	Partially	
KENTUCKY	No	No	No	Yes
LOUISIANA	Yes	Flood Control, \$10 million. Drainage Improvements, \$5,275,000	Immediate future as well as postwar	
MAINE	Maine Development Commission	Yes — several including State-length toll highway	Yes	
MARYLAND	Yes	\$2,317,000 under consideration	Yes	Yes
*MASSACHUSETTS	Postwar Readjustment Committee			
MONTANA	Yes	\$8,604,000	Future	Uncertain
NEVADA	Yes	Hospitals, prisons, schools. No allotment	Sketches	Uncertain
NEW HAMPSHIRE	Yes	Some planned, both post-war construction & reconstruction.	On a number of buildings	Work will continue for the duration
NEW JERSEY	Yes	\$15,000,000	Yes	Possibly
NEW YORK	Yes	12 projects — mapping plans at present	Yes	Yes
NORTH DAKOTA	State Agencies	Pending		
OREGON	Governor and Budget Director	6-year program of approximately \$60,000 biennially	Some	Some completed. Others not until after war
PENNSYLVANIA	Yes	Many millions of dollars planned.		
RHODE ISLAND	Yes	Projects surveyed — \$65,000,000 planned	No appropriation at this time.	
SOUTH CAROLINA	A Preparedness for Peace Commission soon to be established.			
TEXAS	Staff under Governor's direction	Those planned postponed until Fall	Some	
UTAH	Publicity and Industrial Development Committee	\$6 million, part of which is now available	No	After defense construction
VIRGINIA	Yes	York River Bridge, \$3,000,000	Yes	No
WASHINGTON	Yes	Public Works Program being drawn	No	Possibly

*Brochure

POSTWAR SURVEY—CITIES

CITY	PLANNING COMMISSION	SPECIFIC PROJECTS OR APPROPRIATIONS	DESIGNS AND SPECIFICATIONS PROCEEDING	START BEFORE WAR'S END?
ATLANTA, GA.	Yes	Partially planned	No	Held up by right-of-way
BALTIMORE, MD.	Yes	No	No	Yes
*BUFFALO, N. Y.	Yes	Several in process of preparation	On several	Inadequate funds
CAMDEN, N. J.	No	Approximately \$11,000,000	Partially	
CINCINNATI, OHIO	Yes	Definite program not yet selected	Some through 5-year improvement plan	Partially
DENVER, COLO.	Planning for the future and have employed specialist to aid in the matter			
*DETROIT, MICH.	Capital Improvement Committee	No	Awaiting report from the Committee	Possibly
DULUTH, MINN.	Yes	Projects have been submitted by Committee	No	Depends on funds
ERIE, PA.	Committee	\$10 million, possibly \$20 million	Yes	Possibly
FLINT, MICH.	Yes	\$17,045,000. Excluding funds for Board of Education	Yes	
*HOUSTON, TEX.	Report			
INDIANAPOLIS, IND.	Yes	Estimated \$1 million	Planned	No
KANSAS CITY, MO.	Yes	Approximately \$68,000,000	By Fall	
*LOS ANGELES, CALIF.	Yes			
LOUISVILLE, KY.	Yes	Not enough progress to report	No	Yes
MEMPHIS, TENN.	Yes	Approximately 130 projects planned by agencies	Partially	Uncertain
MIAMI, FLA.	Yes	\$44,418,500	Yes	Some
MILWAUKEE, WIS.	Long Term Improvement Program Committee	No	Some for projects which will be included in program	No specific appropriation for such work
NEWARK, N. J.	Committee of Public Work Reserve	Approximately \$6 million	No	
NEW BEDFORD, MASS.	Yes	Work held up by lack of funds		
*NEW YORK, N. Y.	Yes	\$628,005,182	Yes	Within six months
OKLAHOMA CITY, OKLA.	Yes	No special postwar projects	No	
PATERSON, N. J.	Industrial Committee	20 specific projects. Approximately \$2,646,997	Preliminary form	
PORTLAND, ORE.	City Planning Committee	Sewage Disposal System—Approximately \$11 million	No	When City Council thinks advisable
RICHMOND, VA.	Yes	103 projects—estimated \$27 million	Yes	
ROCHESTER, N. Y.	Yes	Estimated \$5 million—increased from time to time	Yes	Yes
*SACRAMENTO, CALIF.	Capital Improvement Program	Yes	Yes	
ST. LOUIS, MO.	Public and Improvement Planning Board	Many proposed — amounting to many millions	Plan to start in near future	
SALT LAKE CITY, UTAH	Yes	No — lack of funds	No	Improbable
*SAN DIEGO, CALIF.	Yes	No appropriation to date		
SAN FRANCISCO, CALIF.	Yes	Preparing program	Some	Yes
ST. PAUL, MINN.	Yes	Nothing definite decided	Some	Some
SEATTLE, WASH.	Yes	No authority or funds. Plans indefinite because of war industries		
SOUTH BEND, IND.	Yes	Intercepting sewer started — \$2,200,000. Sewage treatment plant planned upon completion of above — approximately \$1 million		
TACOMA, WASH.	Yes — but inactive			
TAMPA, FLA.	Yes	Several millions programmed	Yes	Yes
WICHITA, KAN.	Yes			
YONKERS, N. Y.	Yes	Incomplete	Yes	Yes

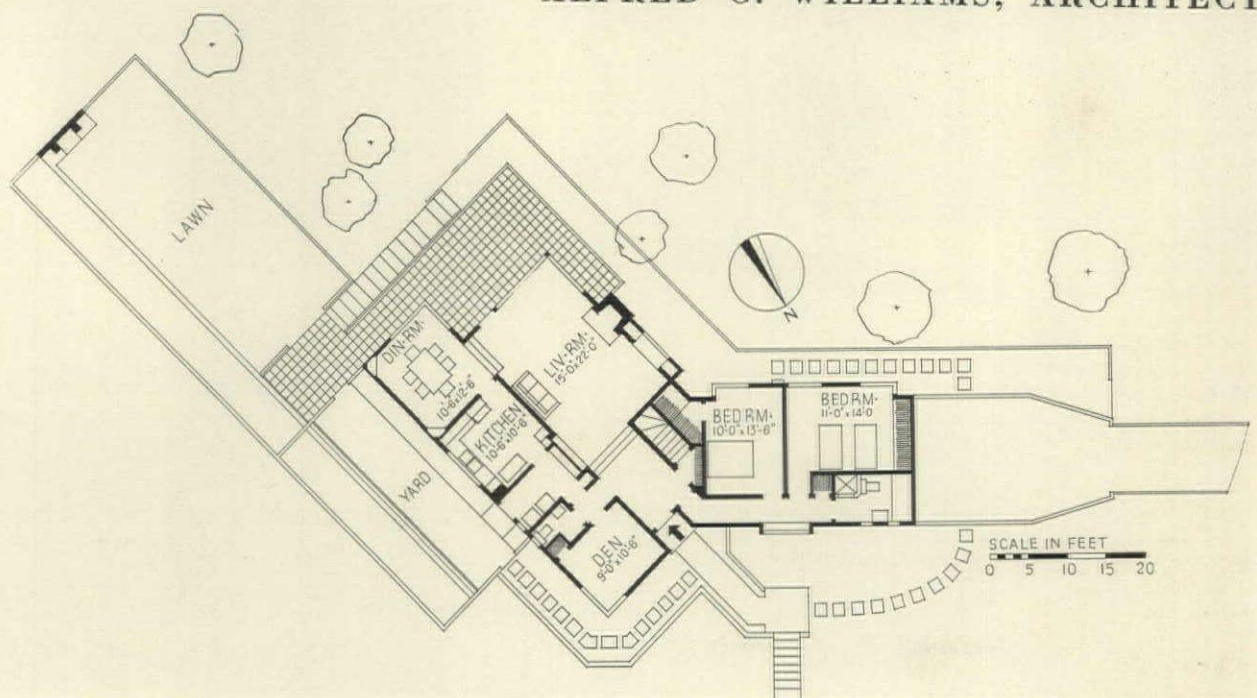
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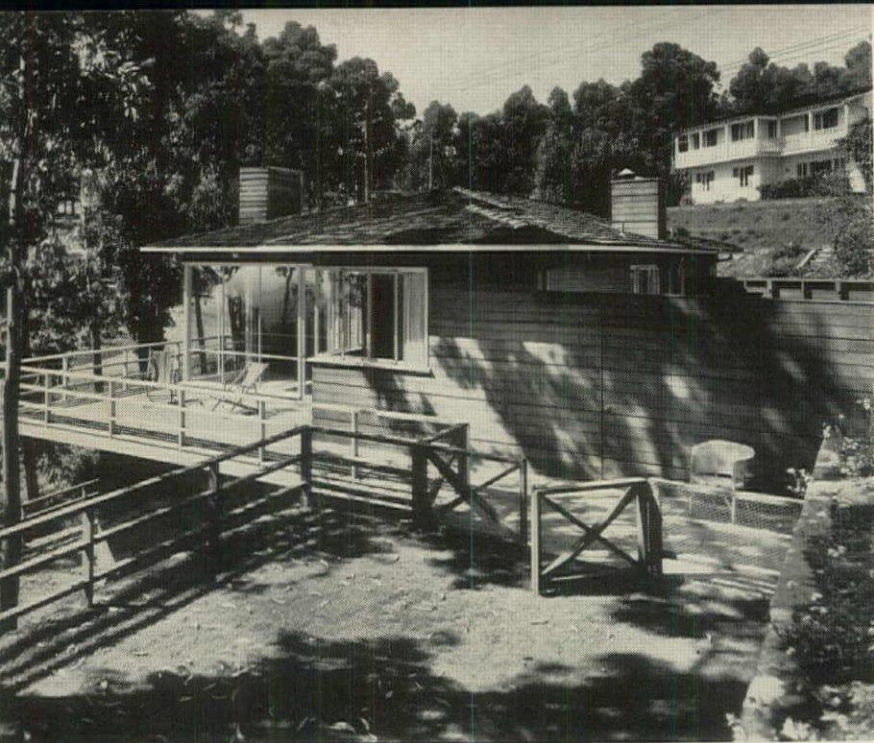
HOUSES



Photos, Max Hetnegg

ALFRED C. WILLIAMS, ARCHITECT

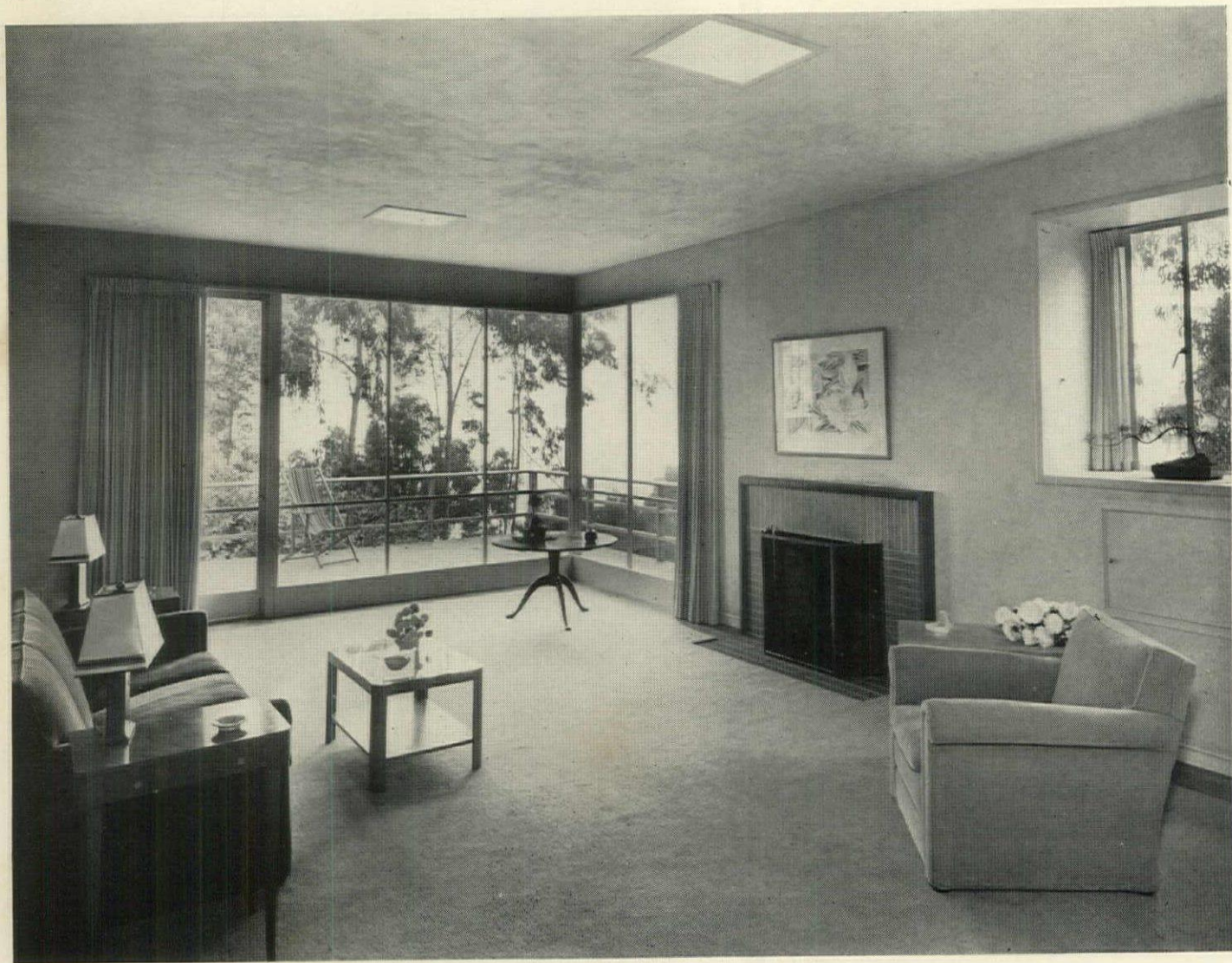




ALFRED C. WILLIAMS, ARCHITECT



Both the plan and photographs of this house bear witness to the extreme irregularity of its quarter-acre site: the drop is so steep that the first floor is well below street level, and there is a further drop which leaves two full stories exposed at the rear. The interest of the house stems largely from the interdependence of site and plan: the open living room with its cantilevered deck outside, the fenced-in lawn and the graded terraces below are all special features developed to take advantage of the peculiar character of the site.





CONSTRUCTION OUTLINE

STRUCTURE: Exterior walls—redwood rustic, Brownskin paper, Angiers Corp., studs, wood lath, wire, hardwall plaster and California stucco, California Stucco Co. Floors—Douglas fir. Ceilings—lath and plaster, U. S. Gypsum Co.

ROOF: Cedar shakes. Deck—terra cotta tile, Richmond Clay Products Co.

SHEET METAL WORK: Flashing, leaders and ducts—galvanized iron. Gutters—redwood.

WINDOWS: Sash and screens—Fenestra, Detroit Steel Products Co. Weatherstripping—Chamberlin Metal Window Strip Co. Glass—quality B, double strength.

FLOOR COVERINGS: Main rooms—oak. Kitchen and bathrooms—Paraffine Co.'s, Inc.

WALL COVERINGS: Bedrooms—wallpaper.

PAINTS: General Paint Co.

WOODWORK: Douglas fir.

HARDWARE: Schlage Lock Co.

ELECTRICAL INSTALLATION: Wiring system—knob and tube. Switches—General Electric Co.

KITCHEN EQUIPMENT: Range—gas. Refrigerator—electric. Sink—Kohler Co.

LAUNDRY EQUIPMENT: Washing machine—Bendix Home Appliances, Inc.

BATHROOM EQUIPMENT: Kohler Co.

PLUMBING: Soil pipes—cast iron. Vent and cold water pipes—galvanized steel. Hot water pipes—copper.

HEATING: Warm air, Atlas Heating & Ventilating. Water heater—Hoyt Heater Co.

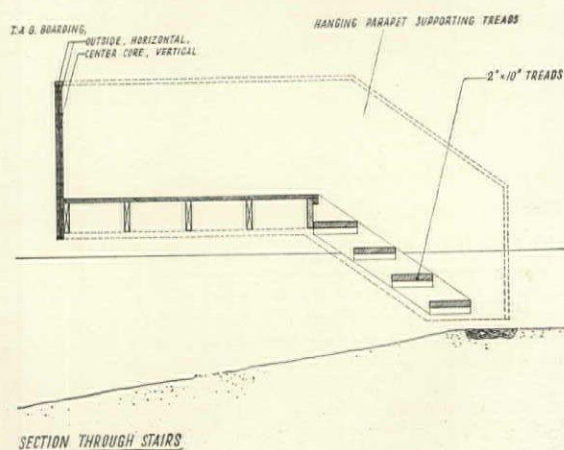
One important plan requirement was the provision of space for rooms to be finished in the future. The architect made use of the difficult site to create a lower floor which will later be divided up into a maid's room and bath and a workroom. At present all living spaces are on the upper level, with the two bedrooms well isolated from street noises by the corridor and bath. The den, in addition to its normal functions provides sleeping space for an occasional guest. The enclosed service yard near the kitchen is used as a supervised play area for small children.



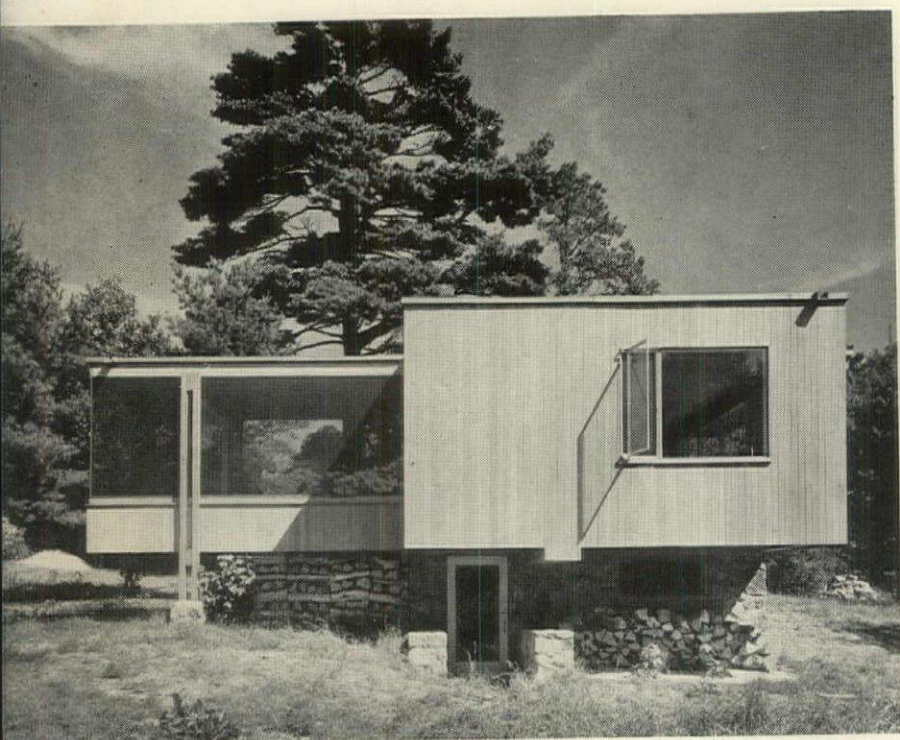
WALTER GROPIUS & MARCEL BREUER, ARCHITECTS

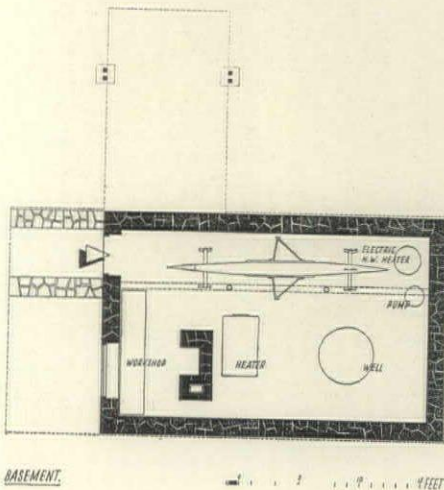
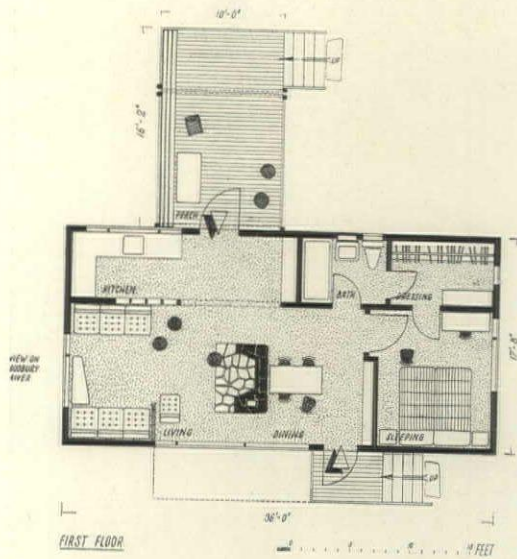


Photos, Ezra Stoller



Incorporated in this small cottage are a number of technical features of unusual interest. The architects have used wood construction, but the finished walls act as stiff slabs rather than covered frames. This treatment made it possible to get an eight-foot overhang without the addition of heavy beams, and to obtain wide openings without the necessity of increasing the size of the lintels. Also worth noting is the entrance stair and parapet. The parapet is made of three layers of tongue and groove boarding, hung from the landing. This solid sheet, similar to plywood in its action, also serves to carry the stair treads. The twin column supports, shown in the photograph at the left, are an interesting device for making a simple, strong connection between column and beams.

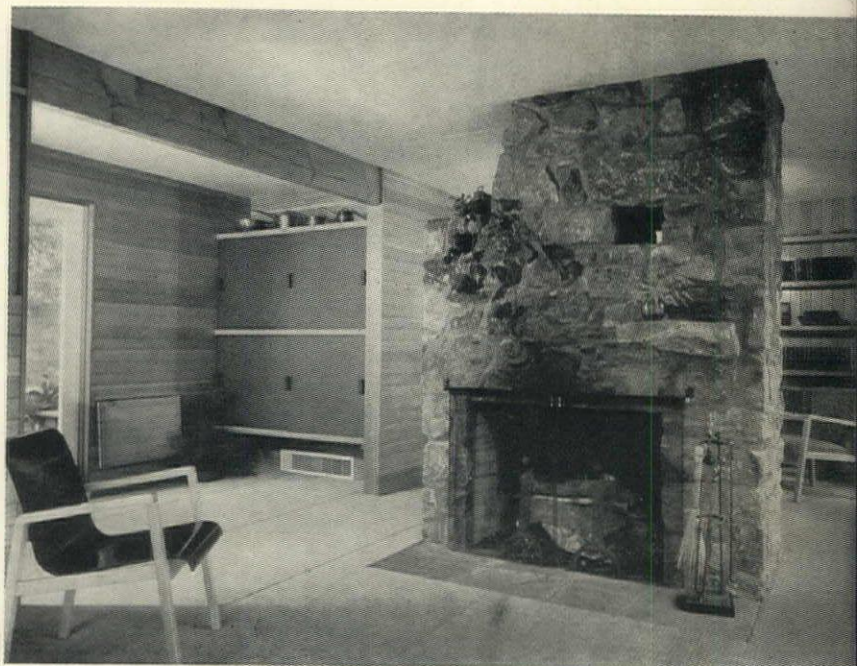
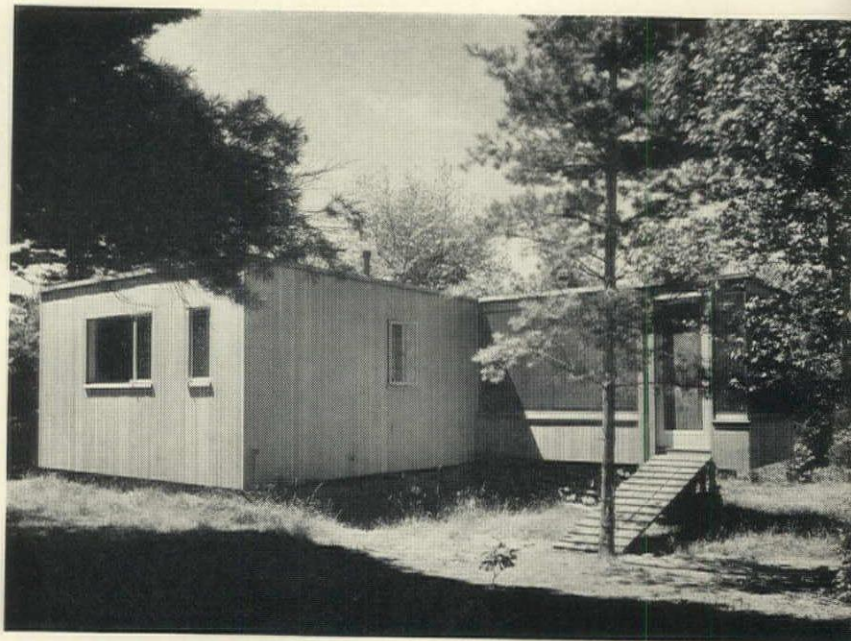
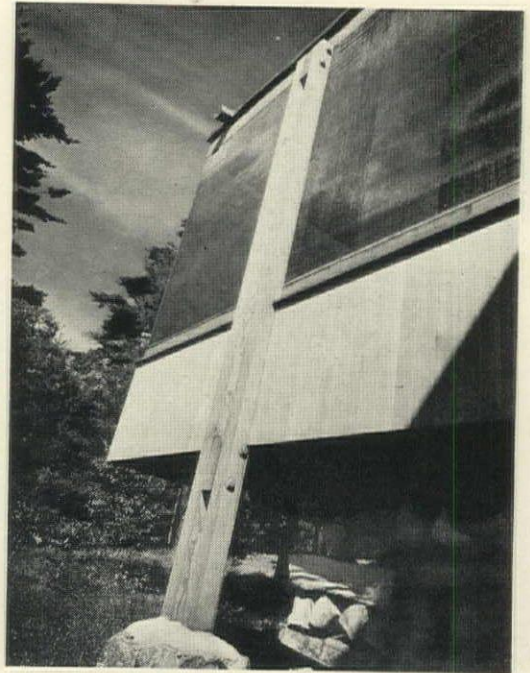




The plan shows a one-bedroom scheme, with an ample dressing room and a well placed bath. The free-standing fireplace is the outstanding feature of the interior, serving the practical purpose of separating the living and dining areas. Characteristic of the informality of the design is the very casual manner in which the kitchen opens into the living room, and the use of this space for access to the porch.

CONSTRUCTION OUTLINE

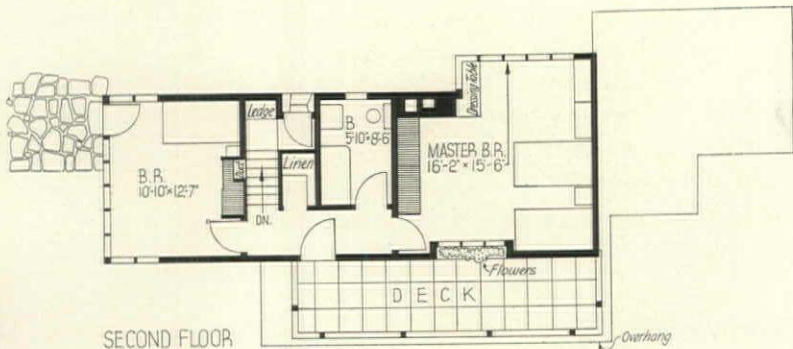
STRUCTURE: Exterior walls—T. & G. fir sheathing, 15 lb. paper, rough boarding, Rockwool, U. S. Gypsum Co., studs; inside—horizontal T. & G. fir. Floors—oak. Ceilings—Weldboard, U. S. Plywood Corp.
ROOF: Tar and gravel.
INSULATION: Rockwool, U. S. Gypsum Co.
FIREPLACE: Heatilator Co.
SHEET METAL WORK: Flashing—copper. Ducts—galvanized.
WINDOWS: Sash—metal, Hope's Windows, Inc. Glass—Herculite, Pittsburgh Plate Glass Co. Screens—Cambridge Screen Mfg. Co.
FLOOR COVERING: Main rooms—straw matting. Kitchen and bathroom—linoleum.
HARDWARE: W. C. Vaughan.
ELECTRICAL FIXTURES: Litecontrol Corp.
KITCHEN EQUIPMENT: Range, refrigerator and sink—General Electric Co.
BATHROOM EQUIPMENT: American Radiator-Standard Sanitary Corp.
HEATING: Warm air system, American Radiator-Standard Sanitary Corp.



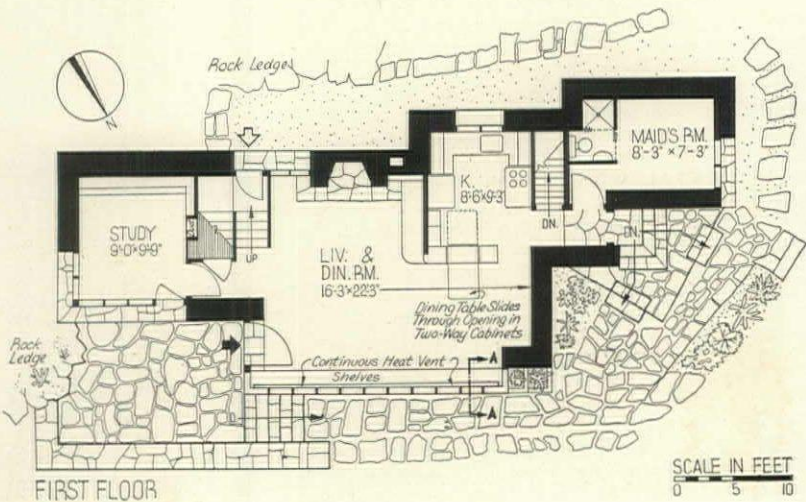
PENROSE K. SPOHN, DESIGNER



Photos, C. V. D. Hubbard

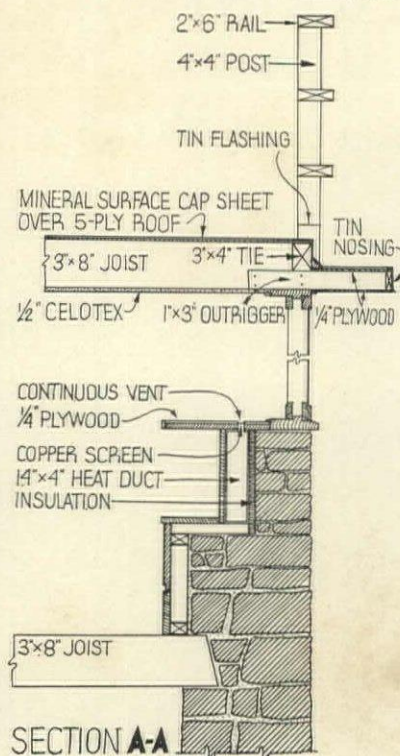


SECOND FLOOR

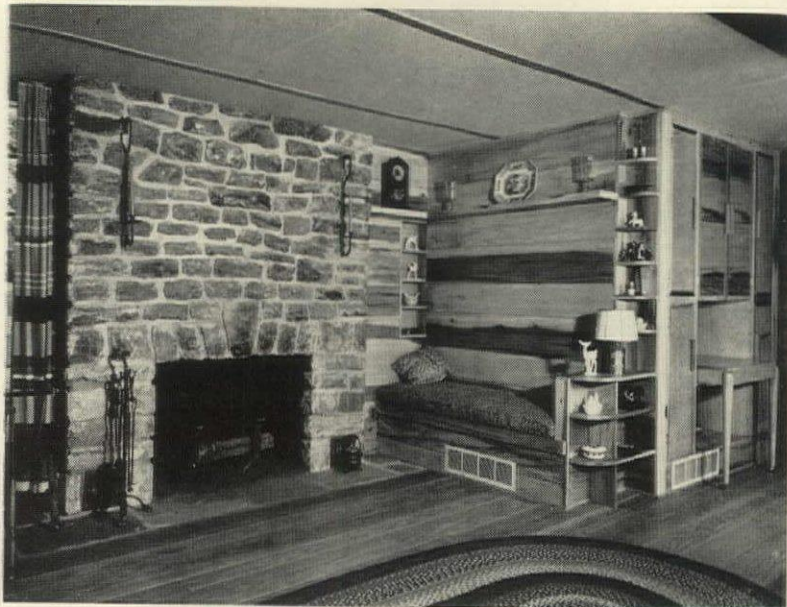


FIRST FLOOR





LIVING ROOM



Built on a steep slope facing northeast, this house is entered from the uphill side at a landing midway between the living and bedroom floors. Small and compact, the plan is one room deep throughout, with the wider, living-room portion projecting out from the body of the house and providing space for a second-floor roof deck on the view side. An ingenious feature is the arrangement of the dining table, which slides back and forth through an opening in the two-way cupboards dividing the kitchen from the dining area of the living room. Cost \$7,500 at 45¢ a cu. ft.

CONSTRUCTION OUTLINE

FOUNDATION: Stone. Waterproofing—Aquaseal, Armstrong Cork Co.

STRUCTURE: Exterior walls—stone, furring, 15 lb. felt, horizontal poplar boards; (2nd. floor)—white pine weatherboarding, studs, gum plywood.

ROOF: Built-up, 4-ply. Deck—80 lb. mineral surface sheetcap over 4-ply built-up.

INSULATION: Outside walls and roof—mineral wool, U. S. Gypsum Co.

FIREPLACE: Heatilator Co.

WINDOWS: Sash—cypress. Glass—Penn-vernion, Pittsburgh Plate Glass Co.

FLOOR COVERINGS: Living room—oak. Bedrooms and 2nd. fl. halls—yellow pine. Kitchen and bathrooms—linoleum, Armstrong Cork Co.

WALL COVERINGS: Living room—stone and native tulip poplar. Bedrooms and halls—gum plywood. Kitchen—1/2 in. Celotex, Celotex Corp. Bathrooms—plaster and Art-lite over Masonite, Masonite Corp.

HARDWARE: Reading Hardware Co.

ELECTRICAL INSTALLATION: Wiring system—BX. Fixtures—Reading Electric Co.

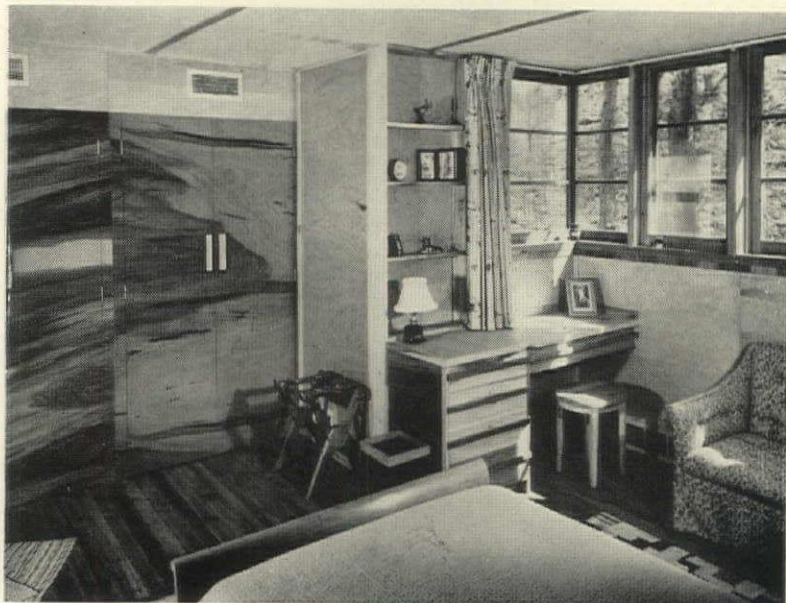
KITCHEN EQUIPMENT: Range—Westinghouse. Refrigerator—Frigidaire.

BATHROOM EQUIPMENT: Kohler Co.

PLUMBING: Soil and vent pipes—cast iron. Branch lines—lead. Water pipes—copper.

HEATING: Forced air, filtering and humidifying, Airtemp Div., Chrysler Corp.

BEDROOM



TRAINING CENTER

FOR THE WOMEN'S ARMY AUXILIARY CORPS

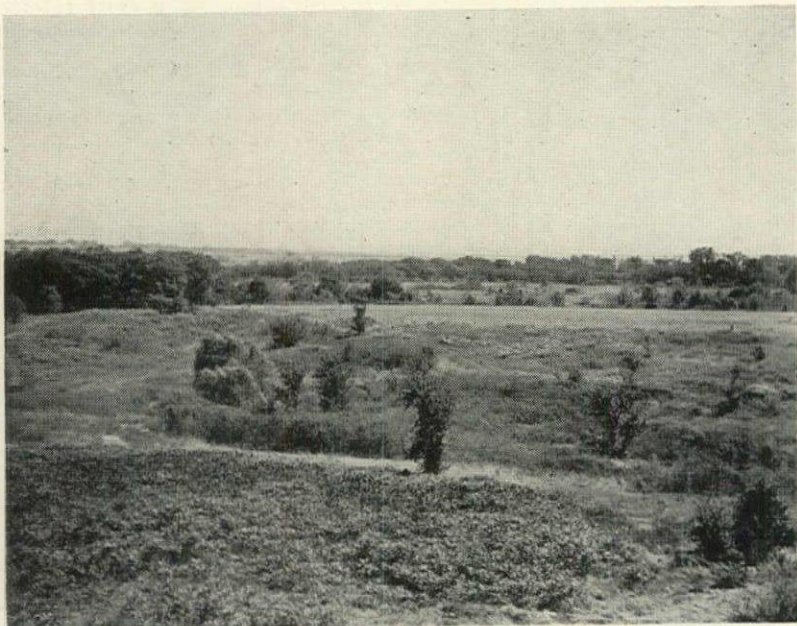


KEFFER & JONES, WETHERELL AND HARRISON, ARCHITECTS

WOODCREST CONSTRUCTION CO., INC.

AND ROSOFF BROS., INC.

ENGINEERS AND CONTRACTORS

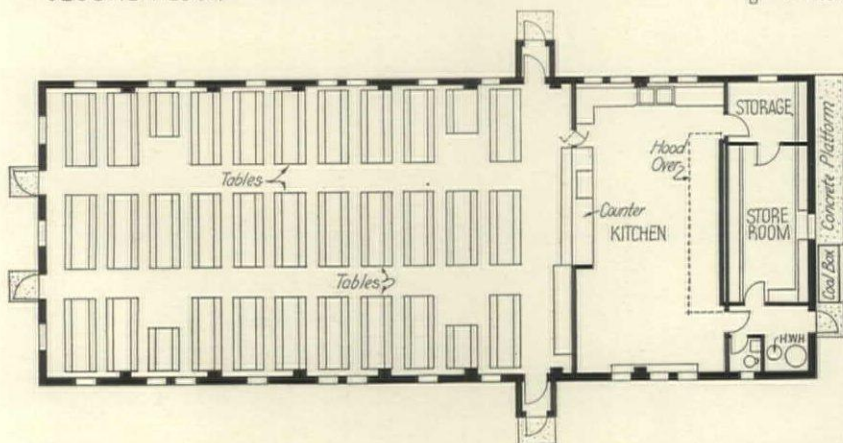
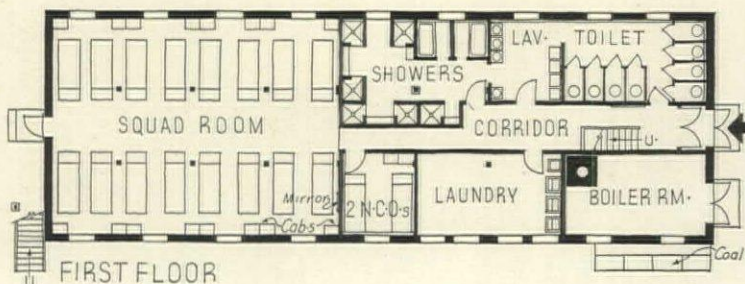
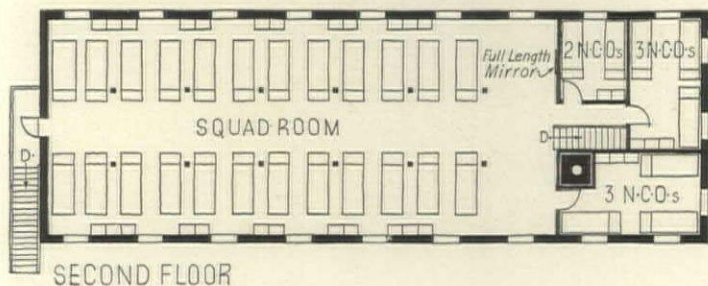


Transformation of the section of Iowa meadowland, shown at the left, into an orderly, well-built training center for the Women's Army Auxiliary Corps took less than two months—a record that is all the more remarkable in view of the fact that masonry wall construction was employed to conserve lumber and transportation. As many as 300 bricklayers working on double shifts laid up the 2 million, locally made structural clay tile which comprise the 13 in. walls. The WAAC Center consists of a total of 112 separate buildings, including 63 barracks, 10 mess halls, 25 storage and administration buildings and 10 classroom structures, built from identical plans. A headquarters building, infirmary and chapel are also included. More than 2,500 workmen were employed in its construction, 7½ miles of sewer, water and gas pipes laid, and 3.2 million ft. of framing lumber used in the construction of the second floors and roofs.

Barracks, mess halls and auxiliary buildings follow somewhat the design of similar structures for the regular army, with concrete-slab floors set



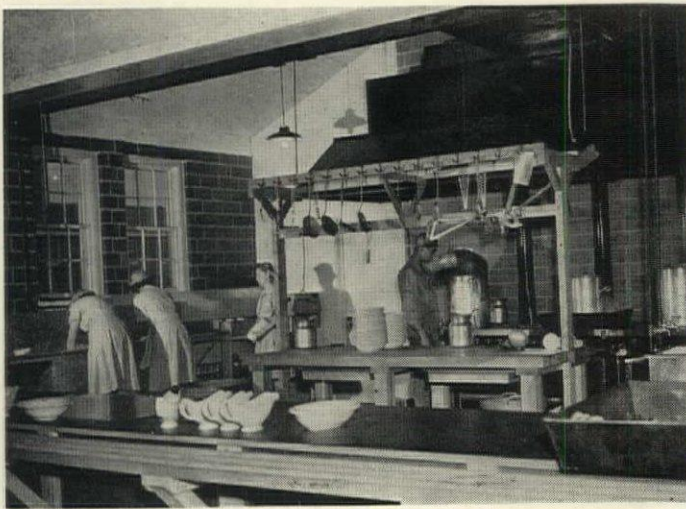
SQUAD ROOM



MESS HALL



KITCHEN

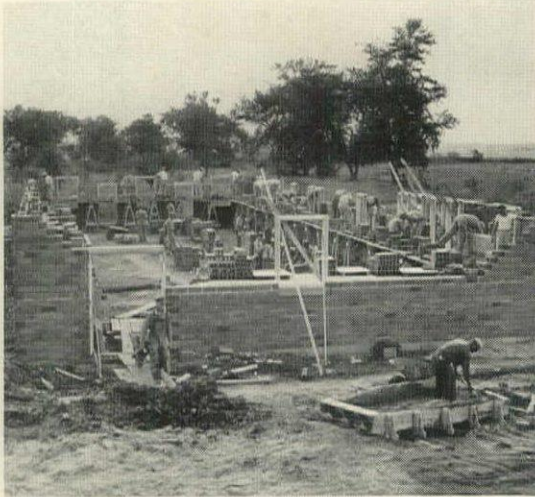


directly on the ground over a sand fill and finished with wood flooring on sleepers, but many additional refinements have been added. Each of the buildings has its own steam radiator heating plant, producing the forest of chimneys shown in the general view on the facing page, and certainly questionable from the standpoint of materials and fuel conservation. The timber internal structure, as shown in the typical squad room above, is crudely handled, but this was probably justified by the need for speedy erection. Clay tile walls are exposed on the inside, providing an excellent internal finish for all of the buildings, and particularly appropriate to the kitchens and mess halls (below).

TRAINING CENTER



1. Finishing concrete floor slab.



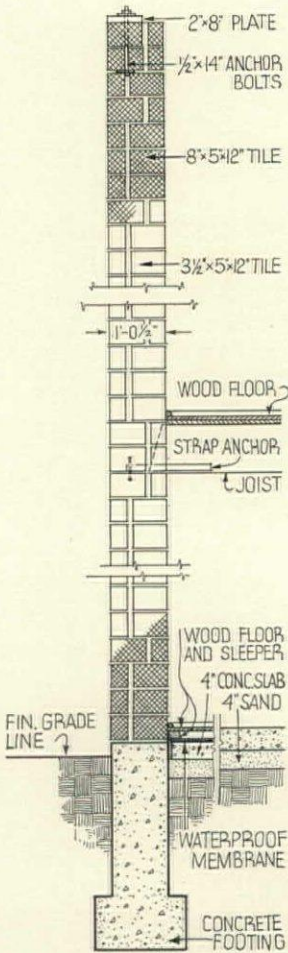
2. Structural clay tile walls under construction.



3. Placing first-floor waterproofing.



CLASSROOM BUILDING

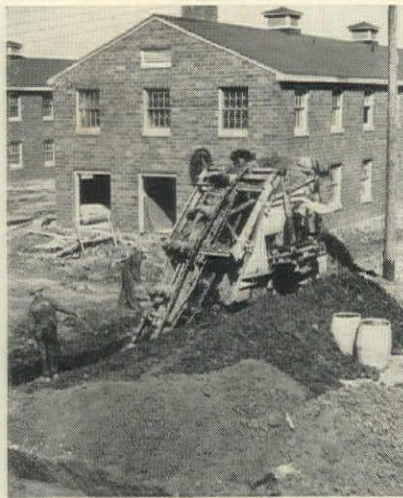


TYPICAL WALL SECTION

Typical wall section above shows use of 8 in. and 4 in. tile to produce the 13 in. wall, and construction of the first floor directly on grade. Exterior and interior views of the typical classroom building (left) show that few concessions have been made to conventional concepts of beauty, and yet the result is neat and attractive. Classroom furniture, as evidenced by the lower picture, was evidently assembled by the carpenters on the job.



4. Scaffolding for second-floor wall construction.



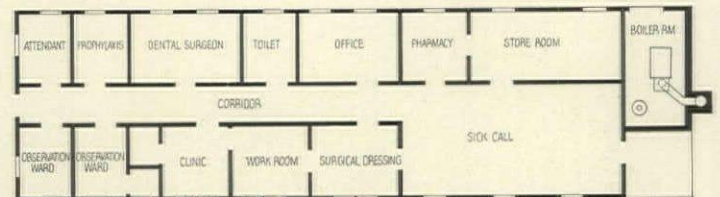
5. Trenching machine in action.



6. Bulldozers grading finished roadways.



INFIRMARY



INFIRMARY

CHAPEL



CONSTRUCTION OUTLINE

FOUNDATIONS: Concrete.

STRUCTURE: Exterior walls—glazed clay tile; inside—wood studs, gypsum board, National Gypsum Co. Floors—concrete slab or maple.

ROOF: Slate covered asphalt shingles, Certainteed Products Corp.

SHEET METAL WORK: Flashing—black iron. Ducts—sheet iron.

INSULATION: Walls—clay tile. Roofs—gypsum board, National Gypsum Co.

WINDOWS: Sash — wood. Glass — single strength, quality A.

WALL COVERINGS: Gypsum board, U. S. Gypsum Co. and Presdwood, Masonite Corp. **HARDWARE:** Yale & Towne and The Stanley Works.

PAINTS: Sherwin-Williams Paint Co.

ELECTRICAL INSTALLATION: Switches—Westinghouse Electric & Mfg. Co. Fixtures—Benjamin & Curtis.

PLUMBING: Fixtures—Kohler Co. Pump—Federal Pump Corp. Soil pipes—cast iron. Water pipes—steel.

HEATING: Steam system. Boiler and radiators—National Radiator Co. Thermostat — Spencer Thermostat Co. Valves—Carpenter & Paterson. Water heater—Weil-McLain Co.

A. R. P. IN OFFICE BUILDINGS



(Previously published A.R.P. material: Nov., '41, *Building For Defense* issue; Jan., '42, *Civilian Defense* issue; June, '42, *A.R.P. in Apartment Houses*; July, '42, *A.R.P. in Hospitals*; Aug., '42, *Industrial Plant Protection*; Oct., '42, *A.R.P. in Schools*.)

Protection of office personnel, visitors and building property the prime aims of office building A. R. P.

Outstanding emergency problem to managers of office buildings with large numbers of workers (above, the Metropolitan Life Insurance Building in New York; employees: 15,000—right, the du Pont and Nemours buildings in Wilmington; employees and visitors, daily, about 10,000) is rapid movement of them to safe areas, maintenance of morale during this period, policing and protection of company property at the same time. These buildings, selected as typical, have evolved workable schemes and procedures to guarantee effective action when an emergency arises.



PROBLEM NO. 1—ORGANIZATION

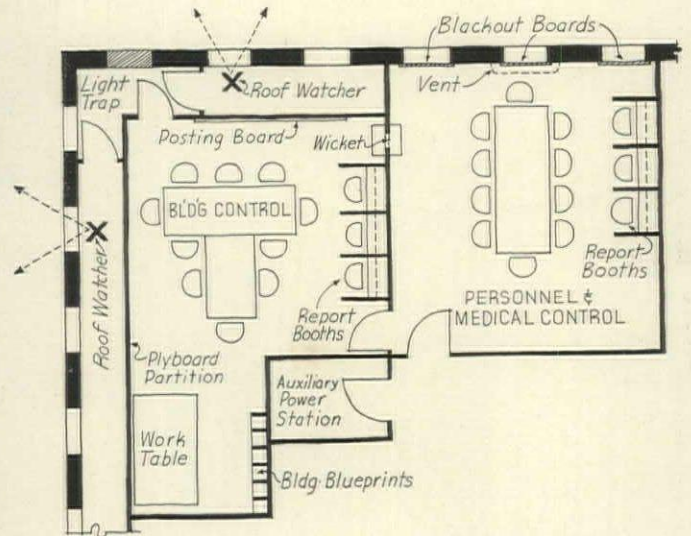


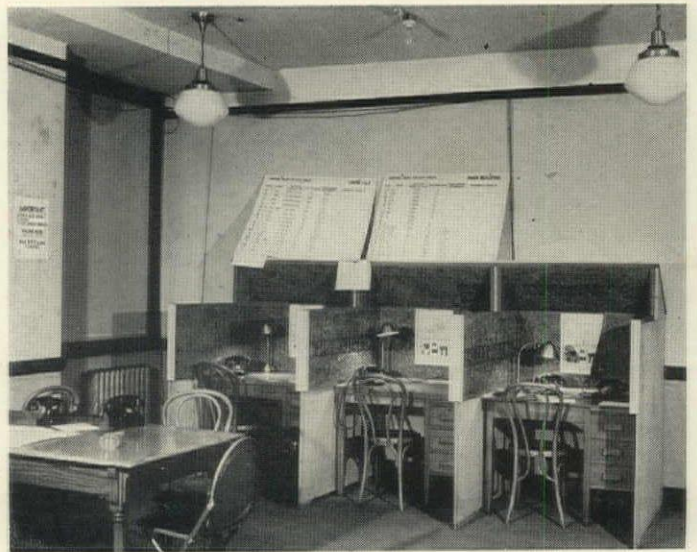
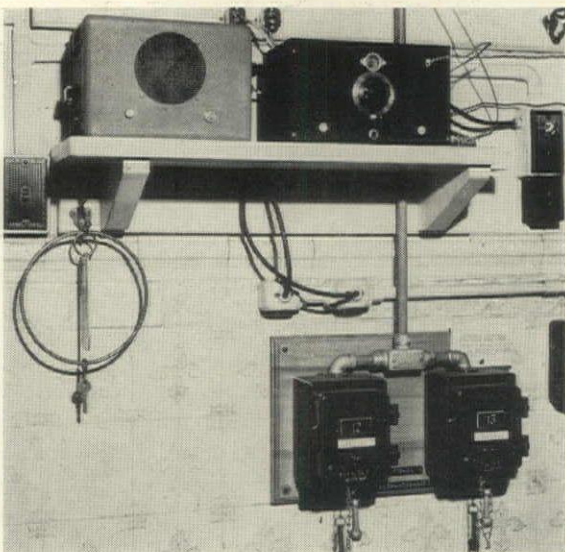
Diagram of control room (which was built specially for this purpose, is kept locked and secret at all times to prevent sabotage) shows complete working facilities for receiving alarm at control booths, noting movement of squads (fire, rescue, decontamination, etc.) on posting board. Each member of the report booths has two telephones on separate systems, a common talk system in case both go out.

The problem of employe organization must be solved in conjunction with that of occupants of stores within the building and downstairs corridors. At Metropolitan Life, a model system has been developed, stemming from one main control room (above left) strategically located, which receives the first alarm from standard police radio or beam receiver located in guard room (below left), transmits it by alarm to all points in the building.

Located in a downstairs guard room, where facilities were extended for A.R.P. work, are three radios, 2 of which are shown below. Not shown is a standard AC-DC portable which

plays 24 hours a day at one station. Picture shows a standard police radio and a beam receiver, operative only when standard broadcasts go off the air. Note alarm transmitters for guards to operate on off-hours, connected in parallel with control room boxes directly below radios.

A corner of the control room, (below right) showing sound-proof booths, where reports of emergency needs, occupancy of key posts throughout building are received. American Legionnaire, upper left, one of several organizations assisting, is using a public address system to clear downstairs corridors, direct visitors to safe areas.



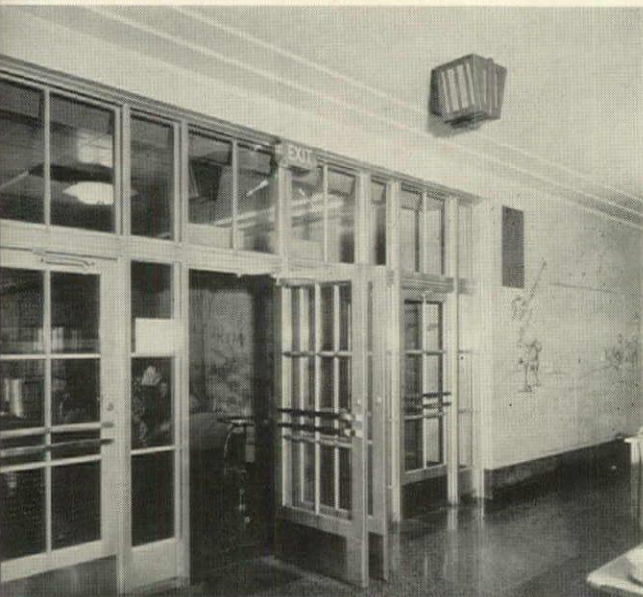
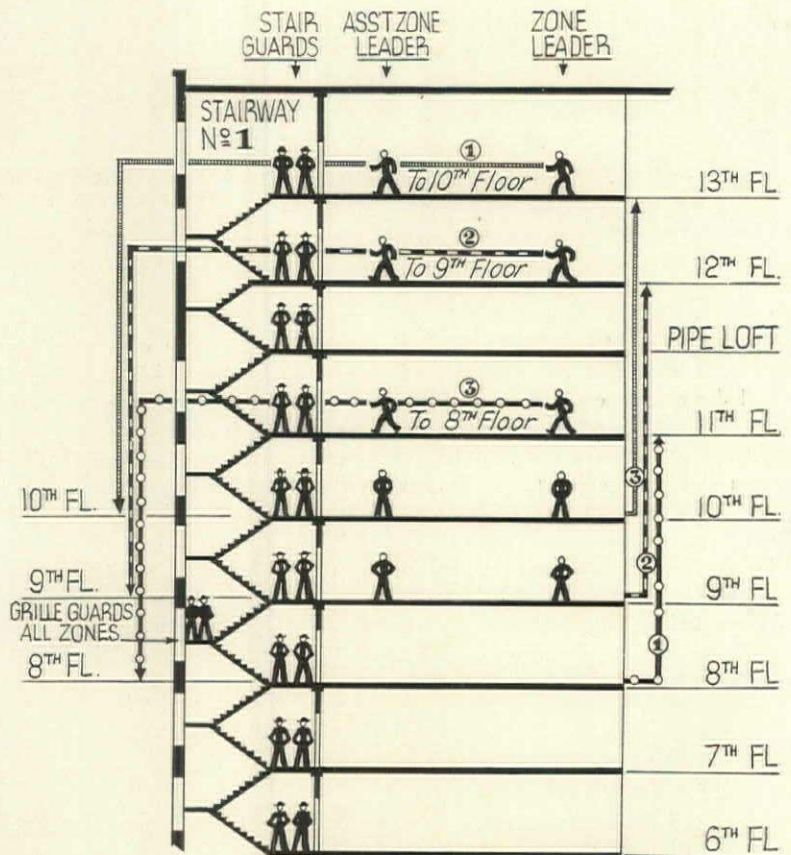
A. R. P. PROBLEM NO. 1—ORGANIZATION



Above, a stairway entrance and hall in the du Pont Building, showing regular fire alarm system bell (which would be used only if other systems failed) and small Klaxon placed over first-aid room, near fire hose. Forty-two Klaxons are placed throughout building, have been found to be far more efficient than fewer large horns.

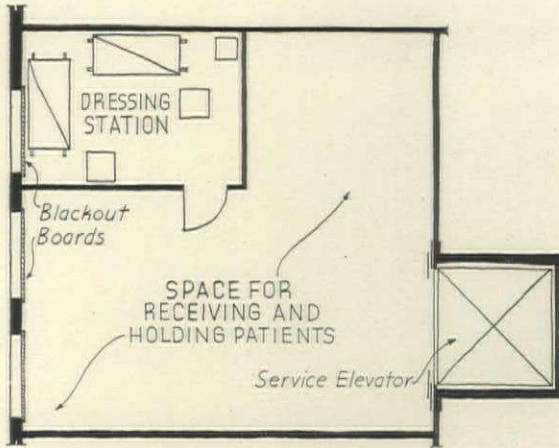


Closeup of siren used in du Pont building basement to overcome noise of motors and other machinery. On upper floors, Klaxons are used widely (see photo left). Most commonly accepted alarm schedule for alert is 5 seconds on, 3 off for 16 blasts, for all-clear a continuous 20-second blast.

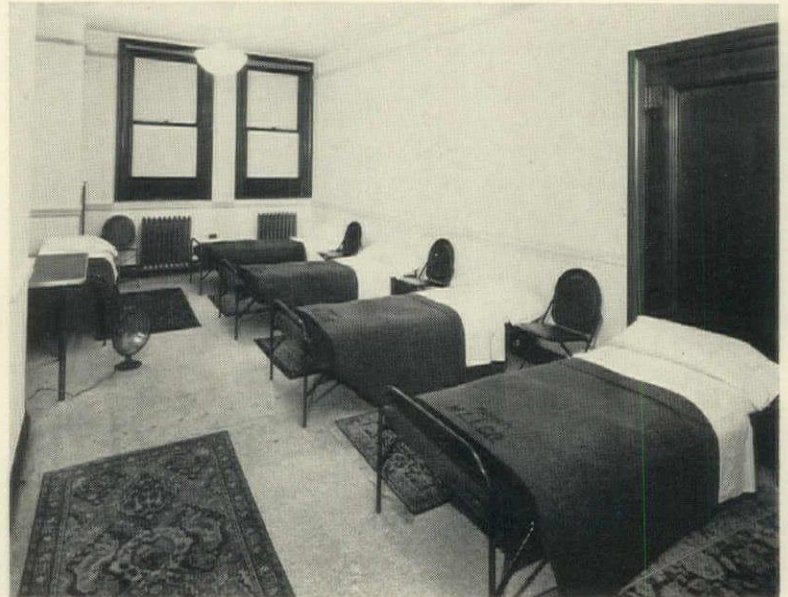
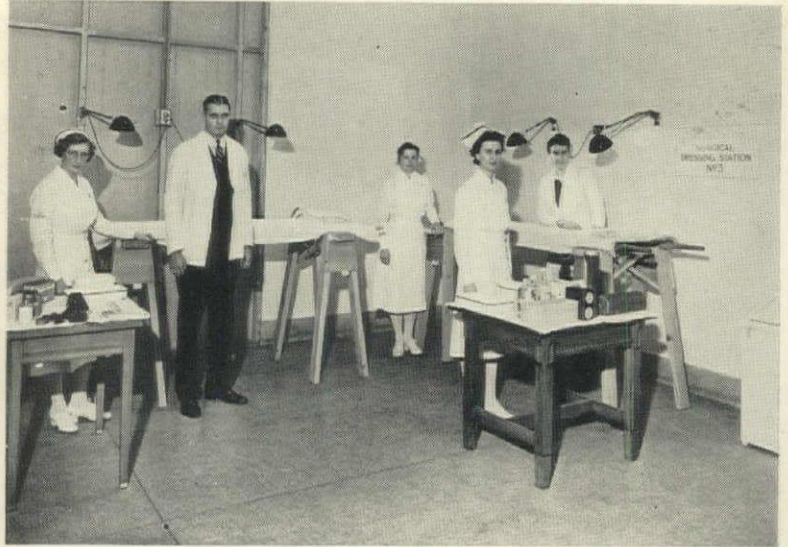


Above, scene from an air-conditioned basement lunchroom in the Metropolitan building. Lunchroom problem is huge in many buildings servicing their own employees. Solution here is to hold employees in lunchrooms until upper-floor employees are transported to shelter areas, then announce over public-address system, seen above, when and how many persons are to leave to go to safe areas, thus preventing panic, overcrowded elevators.

Du Pont has evolved a graphic and useful chart (above) placed on each floor, readily accessible to all wardens and occupants. It shows where occupants of unsafe floors are to go, what stairway they use, where guards and wardens stand guard. All employees are divided into groups of 30, a group leader for each, who checks daily on attendance, knows the chart of procedure by heart, is in turn responsible to a zone leader (see page 88).



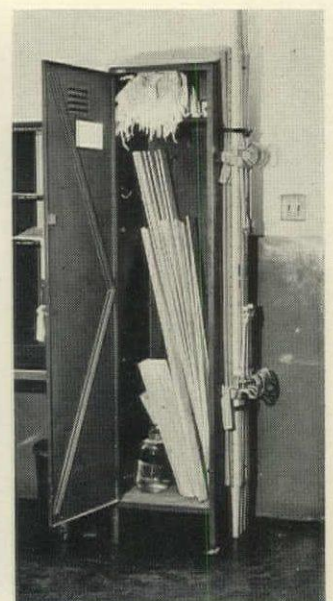
Particular care has been given to first-aid planning in both du Pont and Metropolitan buildings. Above is a diagram of the Metropolitan's specially built surgical dressing station equipped for the immediate care of the more seriously injured. It was built with an eye to spacious outer receiving area, and large adjacent elevator to accommodate stretchers. These were designed so they can be mounted on stands, serve as operating tables. Room is rigged with movable operating lights. Metropolitan's regular staff of doctors and nurses are in charge. Windows are permanently blacked out, walls are of sheetrock with chicken wire vents near the ceiling. Cost of construction was very small, convenience and service rendered in time of emergency will be great.



Above, a dormitory room set up in the Metropolitan near the control room to serve building employees. There are five of these in the building, to allow staff on long duty to rest, can easily be converted to emergency service. Note painted blackout windows.

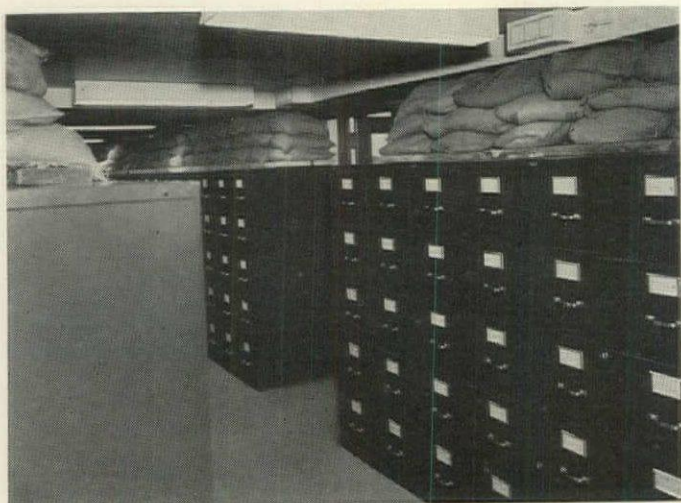


Typical du Pont stretcher room (3-4 on each floor) contains three stretchers (200 throughout building) in specially constructed closets. On shelf are blankets, standing on floor a first-aid package, and Lily cups because building has drinking fountains throughout.

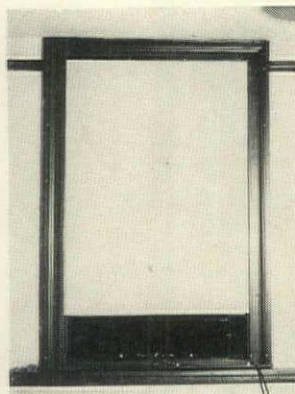


Above, the Metropolitan's dual system of storing first-aid needs. Smaller cabinet (50 in building) contains complete supplies, is manned by trained first-aid units. Note telephone connection to control room. Locker (18 in building) contains strapped (not locked) stretchers, bottled spring water (stays fresh much longer than tap water), bandages, splints.

A. R. P. PROBLEM NO. 3—BLACKOUT



Above, one of the Metropolitan's original methods of blacking out windows in air-conditioned file rooms, at the same time protecting workers from fragmentation. Filled cabinets are placed in front of windows, piled on top with sandbags. If sand is dry, clean, bags will not rot and so remain serviceable for years. Fluorescent lighting provides adequate work-day light.



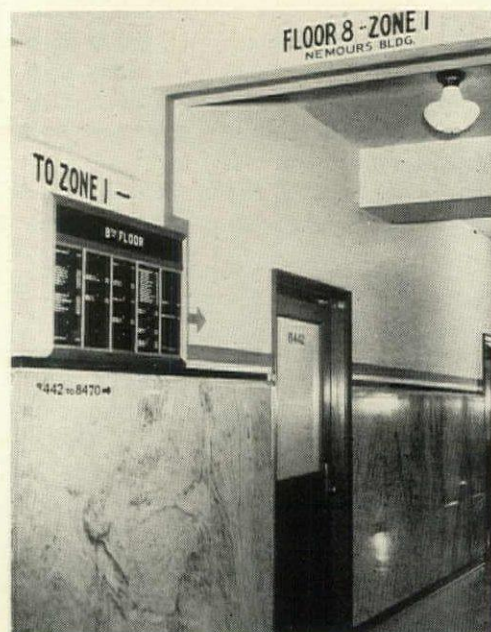
This window in control room at Metropolitan shows composition board blackout with ventilator inserted at bottom to eliminate difficulty of permanently blacked-out windows.

SHELTER AREAS

Most thoughtfully planned shelter area organization is at du Pont, where floors are divided into four zones, each with a distinctive color applied to wall stripes and arrows. Wardens for these zones have distinguishing color clearly marked on arm bands, each employee is provided with a zone tag in the correct color and with number and floor of zone marked. Doors facing on shelter areas and opening from stairs have floors clearly marked on composition-board pane covers to aid those coming to areas from other floors.

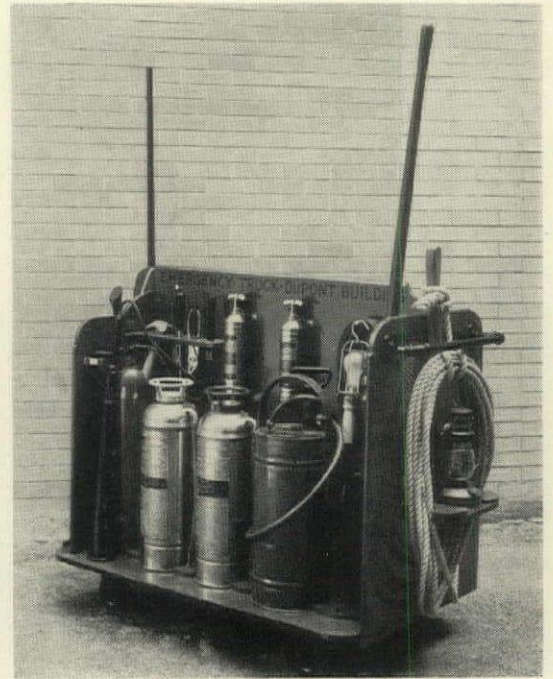


Windows in elevator lobbies and corridors in du Pont building are blacked out with paint (as might be expected). It is applied in two coats, black on outside, white on inside (for appearance's sake and for the morale effect). Exterior paint kills mirror effect of glass if reflection hits window.



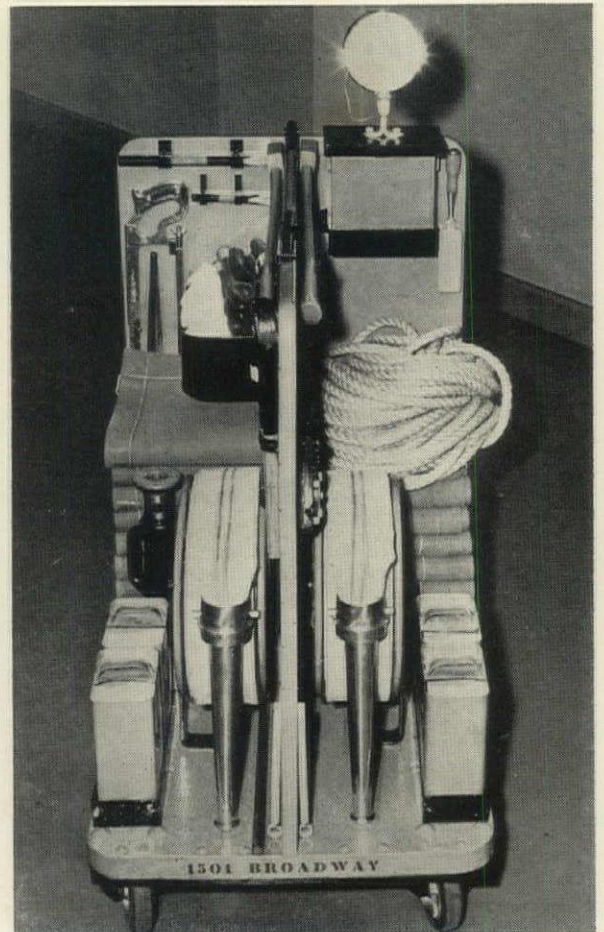
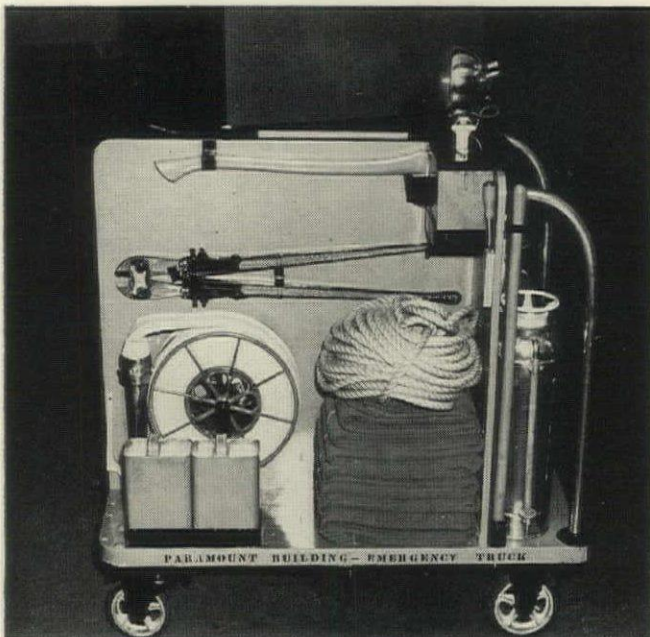
This door at Metropolitan opens on a shelter area, therefore all glass has been removed from both door panel and transom, and composition board substituted. When original glass is wired, it is retained, and board is inserted at room side to provide blackout for shelter area.



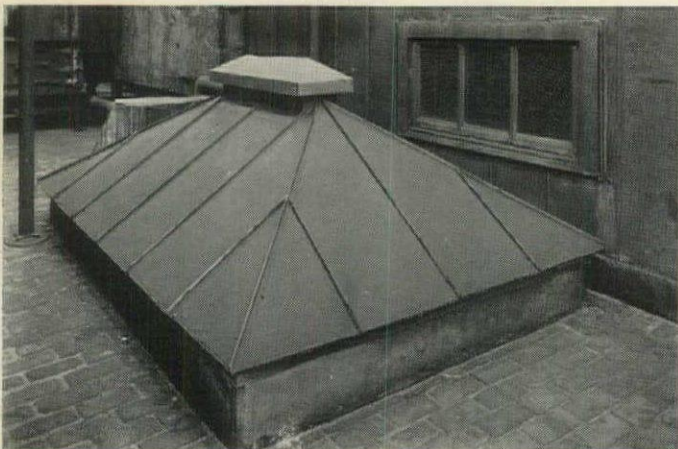


Paramount Building in New York has a fire buggy designed for fire-fighting and wreckage emergencies. Distinguished by a battery searchlight on top and 50 feet of hose, it is economically equipped, not too heavy to move.

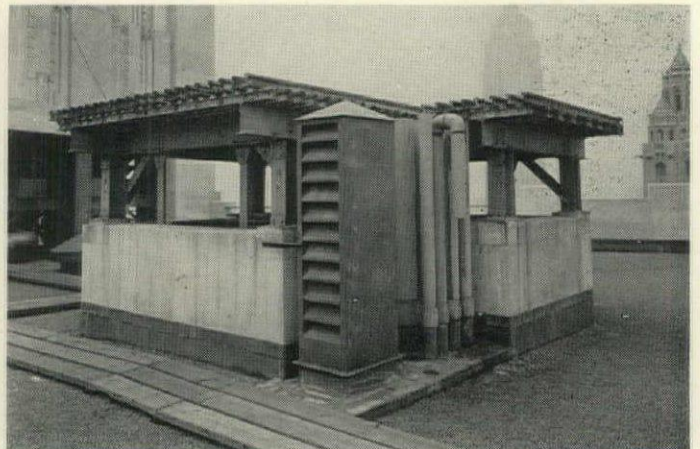
Two types of fire buggies are illustrated here. Contents are similar, differing mainly in weight and size. In general, fire buggies are regarded as having great morale value to passing visitors. Above is du Pont's standard buggy (plans for which will be provided by the company to anyone interested in building and furnishing a similar buggy), containing water pump tank, soda acid extinguisher, carbon dioxide and Pyrene extinguishers, shovel, sledge, wrecking bar, etc. It is primarily designed for emergency and rescue purposes.



Los Angeles' nine-story Chamber of Commerce building, together with its completely organized interior groups, concentrates on specially trained and equipped roof watchers who utilize existing roof ladders for watching posts (see right). Du Pont has equipped its roofs with the usual pails, shovels, etc., also has assigned roof watchers. In all cases roof watchers are specially chosen, since their duties involve greatest danger of panic. At Metropolitan, watchers are specifically instructed to watch only their own roofs, not surrounding ones, report surrounding trouble only when chance of damage to their own area is past.



Mastic-covered skylight at Metropolitan, merely for blackout protection. Because of great number and variety of these, no other protective measures are considered practical.



Metropolitan's fire tower, found to be vulnerable, was reinforced with steel structure and covered with concrete. Picture shows it in stage of construction before concrete was applied on top.



Photos, Ehrenberg

The tendency to frozen ears and hands is an occupational hazard to roof watchers. Metropolitan has thoughtfully provided lockers (above left) for watchers, containing seamen's pea jackets, heavy gloves, flashlights, helmets. Behind door is telephone connected to main control room.

Squad equipment cabinet station on roof at Metropolitan (above right) contains asbestos gloves, pails, shovels, lights, rope asbestos, blanket. One of these is on each roof level kept locked with keys always available. Located strategically, there are 17 of these on Metropolitan's setback roofs.



Roof unit at du Pont shows specially designed box, which opens from top and front to facilitate rapid removal of materials, can be conveniently used by three or more persons simultaneously. Shovels snapped on to side facilitate immediate dealing with incendiaries.

In buildings like the du Pont, where important engineering planning goes on, precautions must be taken against sabotage. Pictures on this page show guard system which has been developed. Certain areas are restricted, can be entered only with a special pass. The building has 137 regular guards, who send visitors to a central reception room where they are passed upon. In Washington office buildings, visitors must have both pass and official escort, thus making sure that no saboteur can wander at will in important areas. Thus the problem of office building protection, involved and complex as it is, is being solved successfully by thoughtful and careful organizations throughout the country. Large numbers of employees are involved in A.R.P. schemes, because it has been found that when almost everyone has a specific duty to do panic is reduced, morale is high. When large masses of people must be rapidly and effectively cared for, the systems that Metropolitan, du Pont and others have evolved seem eminently suitable for the job.

BIBLIOGRAPHY

PROTECTION OF WINDOWS IN COMMERCIAL AND INDUSTRIAL BUILDINGS. Air Raid Precautions Memoranda. British Government publications, British Information Services, New York City. 10¢. Discussion of what was done to protect office building glass during London's blitz. Informative, useful, practical.

AIR RAID PRECAUTIONS. Chemical Publishing Co., Brooklyn, \$3. Especially chapter on Protection of Windows in Commercial and Industrial Buildings.

AIR RAID SHELTERS FOR PERSONS WORKING IN FACTORIES, MINES AND COMMERCIAL BUILDINGS. Memorandum on the Revised Code, August, 1939 (34-9999). British Information Services, New York. 5¢. Mainly of academic interest, since no such structures are planned for the U. S. at this time, but interesting from the structural point of view.

► Also see complete bibliography in January, 1942 issue of FORUM (Civilian Defense), p. 68.



THEY HAVE

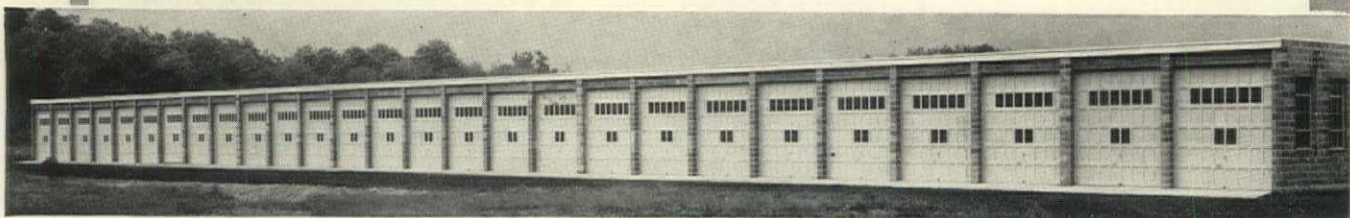
*what
it Takes
to Win!*

**"QUICK
in Action"**

**"QUIET
in Operation"**

**"TOUGH
in Service"**

**"TRIM
in Appearance"**



State Armories, Framingham, Mass.
Equipped with 54 Ro-Way Doors. L.
Santucci, Arlington, Mass., Contractors.

**Today
Ro-Way Doors
are Serving
America in**

Naval Depots
Air Bases
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U.S.O. Buildings
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These are the qualities you want in Overhead Doors, too. That's why you will find in use in the Armed Services and in essential War Industries so many...

Ro-Way Overhead Type Doors

There is a model of Ro-Way Door to meet every service requirement, just as there are trained men for every type of combat. Like the men of our Armed Forces, *performance in action* has won the esteem of America and the confidence of those responsible for securing efficient war-service equipment. Note some of the exclusive features of Ro-Way Overhead Type Doors:

- "Crow's Foot" Outer Bearing Support
- "Zip-Lock" for quick adjustment of Twin Torsion Springs
- "Tailor Made" Power-metered Springs
- "Ro-Way Design" Track Rollers with double-thick tread
- "New Friction-Reducing" Track
- Parkerized and Painted Hardware

Write for Ro-Way's 72-page "Time-saving Specification Book" for Architects. Please attach professional card or letterhead.

ROWE MANUFACTURING CO. 958 Holton Street
Galesburg, Ill., U.S.A.

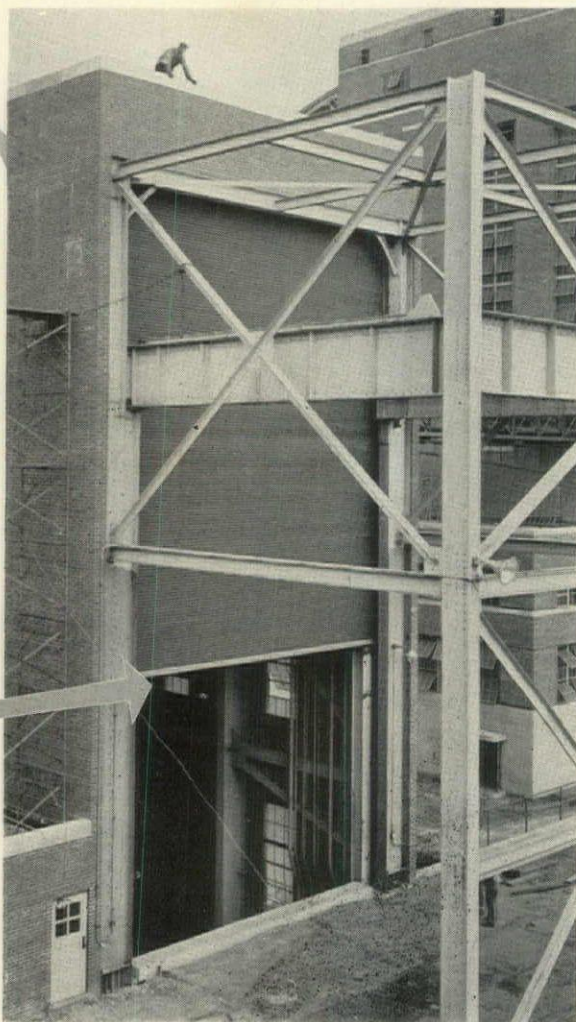
Ro-Way

OVERHEAD TYPE DOORS

"There's a Ro-Way for every Door way!"

**ROLLING UP
THE WALL
OF A
SEVEN-STORY
BUILDING
IN
100
SECONDS**

At the touch of an electric push-button, the whole rear wall of this seven-story transformer hoist house rolls up into a small space on the roof -- and it does it in only 100 seconds.



This "wall" is really a giant Kinnear Rolling Door, 55 feet-six inches in height and 31 feet-four inches wide. It was built to fit a doorway designed to permit a 120-ton overhead crane to travel in and out of this building while moving huge transformers through the opening.

Big as the door is, there was no problem of providing space for it to open into. It coils compactly above the opening, completely out of the way. And this efficient, coiling operation is just one of the Kinnear features that make openings like this possible -- and practical.

In fact, no matter how large or small the opening, Kinnear Rolling Doors afford these same advantages -- and many others. Their all-metal, interlocking-slat construction (originated by Kinnear) not only stands up longer under harder service, but also gives more resistance to fire; more protection against intrusion, sabotage, theft, wind, weather, and accidental damage. They are ideal for any door requirement, and doubly advantageous in time of war! Kinnear Rolling Doors are built to fit any opening, in new or old buildings. Available for motor, manual or mechanical operation. THE KINNEAR MANUFACTURING COMPANY, 1640-60 FIELDS AVENUE, COLUMBUS, OHIO.

WRITE
TODAY
FOR
COMPLETE
DATA ...
OR SEE
SWEET'S



SAVING WAYS
IN DOORWAYS

KINNEAR
ROLLING DOORS

MONTH IN BUILDING

(Continued from page 36)

CONVENTION

This was a month of meetings, a time when scholarly business and labor societies met in Toronto, Colorado Springs, Chicago or Los Angeles to determine what the past year had meant, what the future held.

►To the Building and Construction Trades Department, AFL, at Toronto, Canada, Rear Admiral Ben Morell (chief of Navy's big building branch, Bureau of Yards and Docks) spoke forthrightly:

"You fellows are writing history, but I don't believe you realize it. You are writing the history of the behavior of organized labor in the greatest crisis and danger that this country has ever faced. . .

"I sometimes wonder whether the lack of discipline which I encounter in organized labor is not due to your failure to demand it and to insist upon it as a condition of your service. . .

"I cannot impress too strongly upon you the seriousness of the situation. It is so serious that you and I and all of us, whether we be in the armed forces, in the ranks of labor, in Government or in industry, must not only refrain from work stoppages and strikes, but we must also refuse to be incited to strikes by any employer or any other person."

►And to the same convention were spoken determined words by Brig. Gen. Philip B. Fleming, FWAdministrator:

"In the United States alone we need not 160,000 new houses but millions of them if we are ever going to replace structures that have become obsolete and shelter a growing population. Only by using mass-production methods . . . can we possibly get them. If we go about it in the right way there will be work, not merely at a few seasonal peaks, but every day for every construction worker . . ."

UNCONVENTIONAL CONVENTION

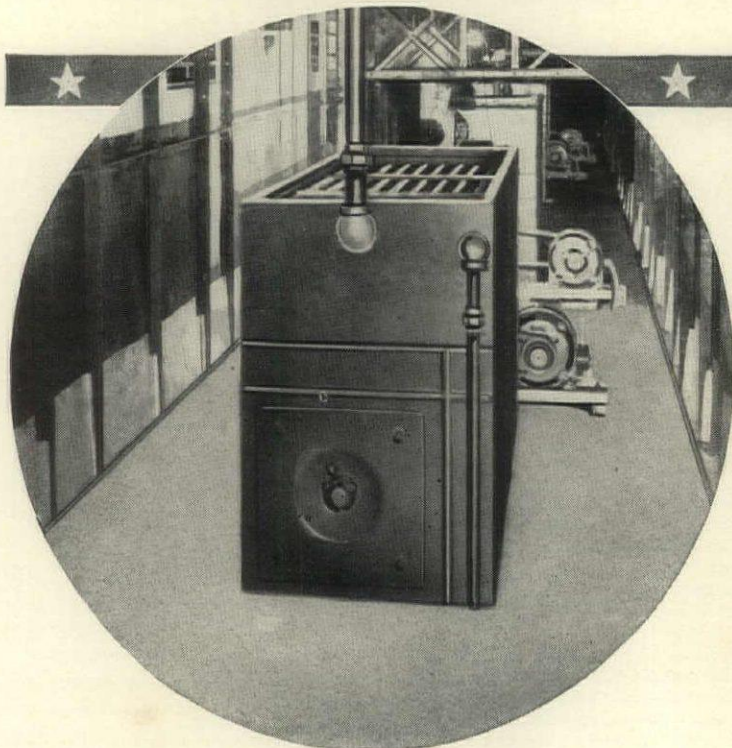
Most active and productive was the California Housing & Planning Association, which held its 2nd annual conference in Los Angeles at month's end, affirmed "the need to begin planning and acting now to meet the grave problems which will confront us at the end of the war."

The timeless, spaceless quality of most conventions was removed at the outset by President Howard Moise (see page 96) who pointed out that the hotel (of meeting: The Mayfair) was surrounded by a classic "blighted area" whose scraggly date-palms and clapboard mansions, on "high-value" property in the center of one of the biggest boom towns in history, had changed for the worse in the years since he and Mayor Bowron were schoolmates there.

A tentative statement on "Basic Principles for a Redevelopment Program," presented by L. Deming Tilton on behalf of a committee of housers and planners,

(Continued on page 96)

46,500 pounds of scrap metal salvaged by change to unit heating



John R. Evans and Company Installs Unit Heating for Drying . . .

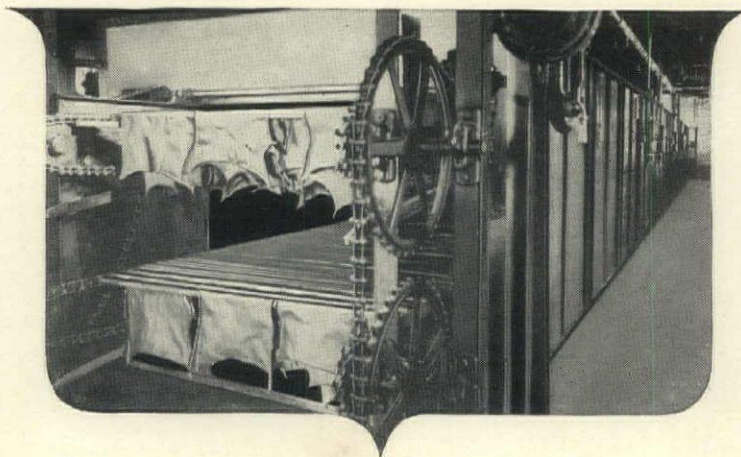
MANY ADVANTAGES result from the use of Carrier unit heating equipment. Take for example, the recent installation at the plant of John R. Evans and Company, Camden, New Jersey, leather manufacturers.

Five Carrier Heat Diffusing Units weighing only 3 tons replaced the former drying equipment which weighed 23 tons, thus releasing some 46,500 pounds of scrap metal for war uses. In addition the new Carrier equipment uses only 25 H.P. for air circulation as compared with 60 H.P. required by the old equipment. Less time is needed for drying hides and an approximate saving of 5% in steam consumption is effected.

Today, these advantages are more important than ever to industry. Carrier will gladly discuss with you the applications of unit heating. Call your Carrier representative or write to Carrier Corporation, Syracuse, New York.

(Above) CARRIER HEAT DIFFUSERS at plant of John R. Evans and Company, Camden, New Jersey. Air is drawn through louvers at top of tunnel by 4 of the units, heated and blown into a plenum chamber beneath the tunnel.

(Right) DRYING TUNNEL through which hides pass. One of the unit heaters is arranged to supply air from above and discharges it into top of tunnel for thorough drying of hides.



The Navy "E", one of the U. S. Navy's most coveted honors, was awarded to Carrier Corporation for excellence in war production.

Carrier Unit Heating

CARRIER CORPORATION, Syracuse, N. Y.

Desk K29

Please send free copy of your Unit Heating Catalog including uses, ratings and diagrams.

Name.....

Company.....

Address.....

City.....

Sanymetal^{*} ALL-WOOD TOILET COMPARTMENTS

WITH COMPLETE
DOOR HARDWARE AND
PARTITION FITTINGS



NOW AVAILABLE - READY TO INSTALL

THIS IS NO TIME to skimp on toilet and washroom facilities, with man hours and woman hours carrying such a high rating. Good health is a priceless asset of the Nation that becomes of even greater importance during wartime. Where adequate and modern toilet and washroom facilities are available lost time from cases of minor illness occurs less frequently. Toilet compartments promote orderliness and cleanliness in the use of toilet and washroom facilities, and therefore indirectly aid in the maintenance of healthful conditions.

You need waste no precious time experimenting and working out a design for toilet compartments to be made of wood or any other substitute material. Sanymetal specialists have already developed an all-wood toilet compartment of standard flush type, as illustrated, that embodies many of the engineered features found in Sanymetal steel compartments. These engineered features provide conveniences and a degree of sanitation that are usually unknown, unappreciated, and overlooked by those who do not have years of specialized experience and skill to draw upon in building toilet compartments. For one thing, this means the elimination of dust-collecting and germ-collecting ledges and pockets.

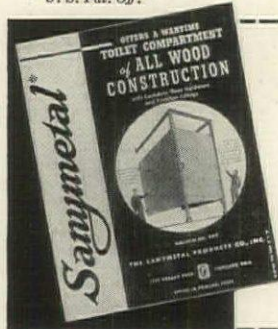
Sanymetal All-Wood Toilet Compartments come to the job ready for immediate installation. One order, one priority, covers the delivery of all the wood partitions and doors, posts and headrails, and all the hardware and fittings that are necessary to complete an installation. No delays for assembling materials or for experimental erection. Sanymetal All-Wood Toilet Compartments embody the results of 27 years of research and experience in making over 53,000 toilet compartment installations. Since toilet compartments aid in the maintenance of healthful conditions in toilet rooms they should be regarded as a wartime necessity in factories, school buildings, and wherever people gather for work or play. Consult a Sanymetal Representative (see your phone book under "Partitions"). Bulletin No. 900 tells all and gives complete specifications on Sanymetal All-Wood Toilet Compartments. Use coupon to request your copy.

Note: Lockers of plywood or tempered presdboard have been developed by Sanymetal Engineers, and your requirements can be met promptly. Write for Bulletin No. 920.

THE SANYMETAL PRODUCTS CO., INC. • 1687 Urbana Rd., Cleveland, Ohio

*Trade Mark Reg.
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"Throw your Scrap into the fight!"



THE SANYMETAL PRODUCTS CO., INC.
1687 Urbana Road, Cleveland, Ohio
Please rush by return mail your bulletin No. 900 on Sanymetal
Wartime All-Wood Toilet Compartments.

Name
Position
Firm
Address
City State

MONTH IN BUILDING

(Continued from page 94)

was discussed in the opening session. Principal proposals met almost general agreement: public purchase (at a compromise price) and continued public ownership of blighted areas, including suburban shacktowns; rebuilding by non-speculative private agencies and public housing authorities in accord with (1) a hard-boiled master land-use plan, and (2)



HOWARD MOISE, President

clear-cut public responsibility for providing suitable "equivalent accommodation," on the site or elsewhere, for all displaced families. Only opposition came from Gordon Whitnall, western representative of the Urban Land Institute, affiliate of the National Association of Real Estate Boards.

The following day was devoted to blood-letting on the West Coast war housing situation. Resolutions were adopted indicating the impatience of local officials with what seems, at 3,000 miles, like con-



ANNE TREADWELL, Secretary

fusion and delay on the part of NHA, and a definite lack of WPB toughness:

► "That the process of determining need and certification be speeded up by all possible means, and that Local Housing Authorities be given definite participation in establishing the need for housing.

► "That the War Production Board decentralize its functions for approval of war housing matters and provide for autonomous decisions in its regional offices to the end that contingencies which arise with regard to Limitation Orders and appeals may be determined locally.

(Continued on page 98)



War creates new uses for stainless

• These coils of ARMCO Stainless Steel are being processed for making aircraft De-Icers.

WHEN ice forms on its wings a warplane loses fighting speed. So it is equipped with De-Icers. ARMCO Stainless Steel is used for making much of this equipment because it is rustless, tough enough to take a lot of abuse, and can be readily formed to any design.

War requirements now absorb the *entire output* of stainless—in parts for planes, tanks, ships and other vital war equipment.

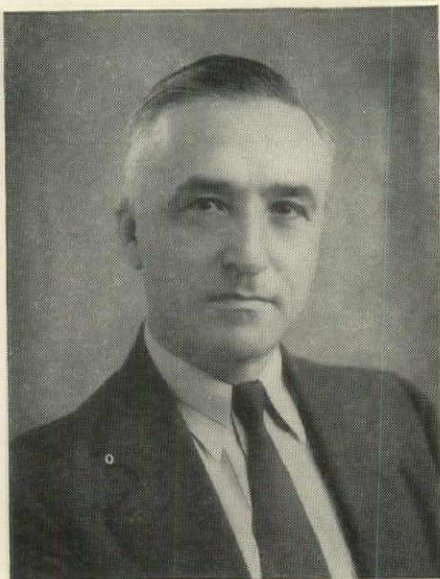
When peace comes ARMCO Stainless Steel again will be plentiful for all the old applications and many new ones. Then you can again employ it for decorative trim, in equipment for hospitals and cafeterias, for roof-drainage systems—all the uses which have contributed to America's high standard of living—the standard we're all fighting to keep today. The American Rolling Mill Company, 3111 Curtis Street, Middletown, Ohio.



• Sanitary and easy to keep clean, ARMCO Stainless Steel is ideal for peacetime equipment in hospital kitchens and operating rooms.



The Army-Navy "E" pennant flies from the staff at all ARMCO plants—a reminder to every ARMCO man and woman of honors won and responsibilities to be met.



L. A. Cherry, of Cherry, Cushing & Preble, Consulting Engineers, Buffalo, N. Y. Member of American Society of Heating and Ventilating Engineers, M. E. Vanderbilt Univ.

"The reduction of wasteful overheating with modern central steam heating controls is an important contribution to the war effort," says L. A. Cherry. "It saves needed fuel and takes some of the burden off the transportation system. By keeping heat loss as small as possible, a building owner reduces his own overhead expense and increases the comfort and working efficiency of building occupants. When compared with the results achieved, the cost of modern central steam heating controls is very reasonable. Operating cost is low because simplicity of equipment assures easy adjustment."

As consulting engineer for Our Lady of Victory Homes of Charity, Lackawanna, N. Y., L. A. Cherry specified the Webster Moderator System of Steam Heating for the Administration Building in 1938, the Infants' Home in 1939, the Hospital Building in 1940, the Orphans' Home in 1941, the new Nurses' Home in 1942. The heating of Pierce's Proprietaries Building, in Buffalo, is also "Controlled-by-the-Weather" with a Webster Moderator System according to plans made by this engineering firm.

WARREN WEBSTER & CO., Camden, N. J. Pioneers of the Vacuum System of Steam Heating Est. 1888 : : Representatives in 60 principal U. S. Cities

**STEAM Heats
America**

MONTH IN BUILDING

(Continued from page 96)

► "At the time that a priority application is approved by the War Production Board for a project, that they either grant an adequate priority rating, equal to that of other agencies, or make an allotment of materials necessary to complete the project.

► "Where Local Housing Authorities are, or will be, established that they can be confirmed as the sole agencies to plan, build and manage all public war housing with the exceptions as stated in the President's executive order.

► "And be it resolved, that in making the above suggestions this Association reiterates and reaffirms the necessity of stripping all war housing, private as well as public of critical materials."



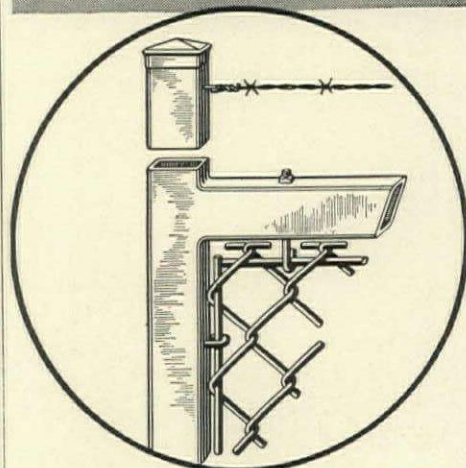
GEORGE YANTIS, far-sighted thinker

(Impatience and concern were somewhat sharpened, naturally, by the fact that both CHPA and the Western States Housing Authorities Association played an effective part in bringing about the reorganization which gave Administrator Blandford full housing power.)

George Yantis (above), farmer-lawyer-statesman from Olympia, Washington, and lively National Resources Planning Board Commissioner, spoke movingly at 2nd day's luncheon on the desperate opportunities of postwar reconstruction—a speech which stimulated planners, and housers, liberals and conservatives alike.

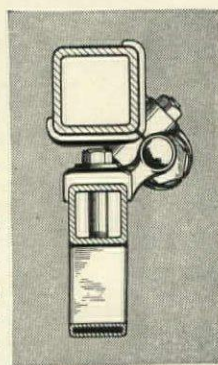
Following was another visiting speaker, Dr. Harlan Barrows of the Bureau of Reclamation announced initiation of joint Federal and local studies looking toward proper use of new water and power from Friant and Shasta Dams for effective redevelopment and improved general welfare of the great Central Valley of California (an area whose contrasts and conflicts have been made internationally famous by John Steinbeck, Carey McWilliams, the Associated Farmers, and the Tolan and La Follette Committees) CHPA will be official advisor on social and economic questions involved in this investigation.

STRENGTH Where It's Most Needed



Anchor Square Frame Gates

Always specify Anchor Square Frame Gates, or equal. They swing freely, latch easily and look more attractive, even after years of service. That's because they're built of strong, two-inch square steel tubing, inseparably butt-welded at all corners to provide amazing rigidity, freedom from sagging and warping. The fabric is firmly held by rounded steel tension rods. Made in both single and double types, in a variety of sizes from single-file entrance gates to large gates for railroad sidings. Find out how Anchor Gates, and other important Anchor features provide extra protection, durability, low maintenance cost. Write for Anchor Protective Fence Manual and name of nearest Anchor Engineer. ANCHOR POST FENCE CO., 665 Eastern Avenue, Baltimore, Maryland.



Special "Clamp-on" Hinges permit 180° swing. Can be adjusted to open either in or out.

1892-1942 Fifty Years of Service

Nation-wide Sales
and
Erecting Service





Exterior Beauty

SAYS "COME IN"

Interior Privacy

SAYS "COME OFTEN"



Large panels of Louvrex Glass add beauty to the front entrance of the Grenadier Dining Room in Detroit's Leland Hotel. Within, soft, diffused light is combined with perfect privacy.

In smart restaurants and hotels, in shops and cocktail bars, Blue Ridge Decorative Glasses solve a dual problem for architects. Their "design interest" lends decorative beauty, gaiety and life... invites customers to come in. They also serve the practical purpose of admitting soft, diffused natural daylight—with perfect privacy.

These same qualities recommended the 3 Blue Ridge "EX's"—Louvrex, Flutex, Doublex—for partitions, decorative panels and door panels in shops and offices. Unsightly areas may be hidden, without sacrificing abundant daylight. Striking

effects may be created by colorful illumination back of decorative glass panels.

You CAN Get Glass

In addition to light transmission qualities, remember glass never needs refinishing, is easily cleaned, does not quickly go out of style. Blue Ridge products are made by Blue Ridge Glass Corporation, Kingsport, Tenn., and sold by Libbey-Owens-Ford through leading glass distributors. For full information, write Blue Ridge Sales Division, Dept. 1283, Libbey-Owens-Ford Glass Company, Toledo, Ohio.



BLUE RIDGE Decorative GLASS

FOR SOFT, DIFFUSED LIGHT • SMART DECORATION • COMPLETE PRIVACY

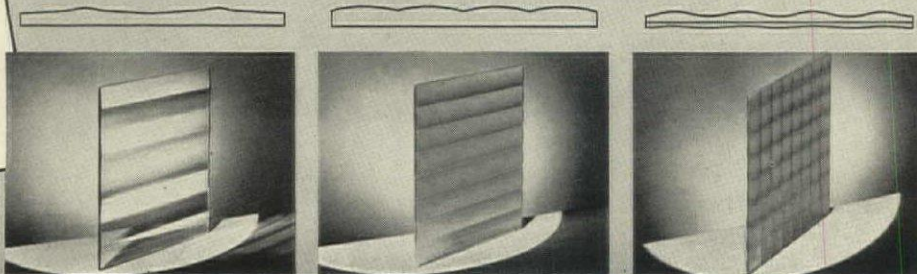


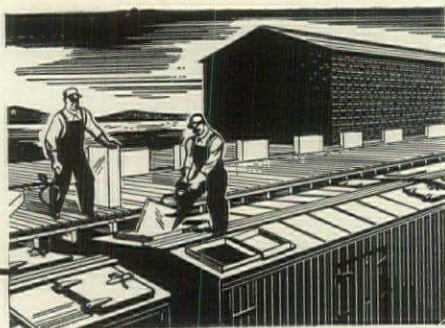
REMEMBER THE
"3 EX's"

LOUVREX

FLUTEX

DOUBLEX



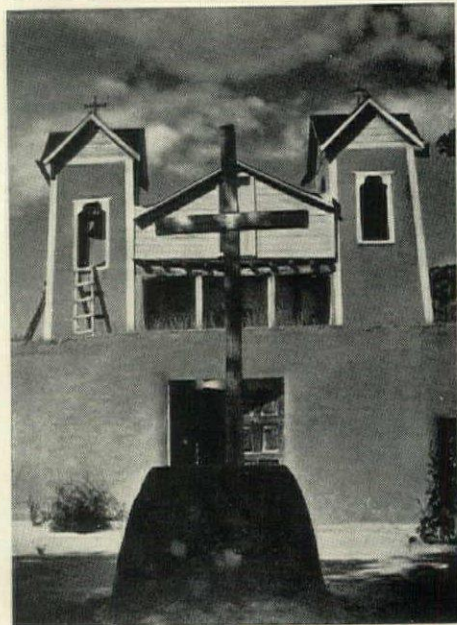


BOOKS

(Continued from page 12)

SANTA FE, N. M., by Ernest Knee. Hastings House, New York. 101 pp., chiefly photographs, 6¼ x 8¼. \$2.

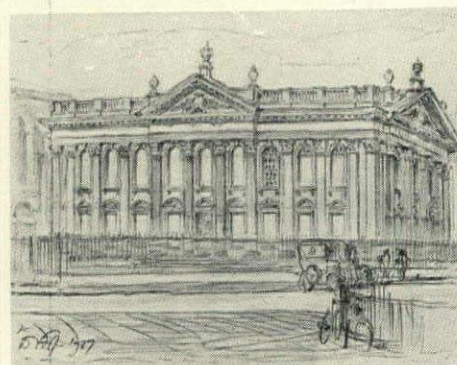
Ernest Knee has worked for many years in the Southwest, and knows his country



intimately. He also happens to be a first-rate photographer. The result is an excellent book. The illustration shows the famous Sanctuary of Chimayo, an old adobe church outside the city.

ARCHITECTURE IN CAMBRIDGE, by Theodore Fyfe. Cambridge University Press. 120 pp., 54 illustrations, 5¼ x 8. \$2.

The buildings at Cambridge offer in capsule form a record of English architec-



ture from the later Saxon times to the present day, and it is this aspect of the town and university that the author has chosen to emphasize. Buildings have been selected as representatives of one style or another, and no attempt has been made to produce an all-inclusive guidebook. The introduction is an outline history of English architecture. The remainder of the book deals with individual buildings and their elements.

(Continued on page 102)

This Long-Lived Lumber Helps The Railroads' War Effort

ICING STATIONS, food-saving stations for the railroads, need some "saving" themselves; they're continually exposed to conditions making them likely targets for decay. So, it's fortunate that a means was found of giving long life to icehouse linings, loading-platform substructures, and decking. The railroads can forget that worry and devote their time to moving vital war materials.

WOLMANIZED LUMBER*, adopted by many railroads for these uses, provides that protection. It is able to resist decay and termite attack because it is deeply impregnated with a proven preservative. The treated lumber is clean, odorless, paintable.

WARTIME STRUCTURES everywhere are being built with Wolmanized Lumber. The use of wood speeds construction by simplifying handling and erection. The use of this long-lived lumber assures long life. The performance of millions of feet of Wolmanized Lumber, some of it in service for over fifteen years, promises low upkeep costs in the years to come.

WOLMANIZED LUMBER has gone to war today. But think of it for the peacetime structures you are planning. It offers you an inexpensive means of defeating decay and termite attack. We'll gladly send you information on its use. Write American Lumber & Treating Company, 1647 McCormick Building, Chicago, Illinois.

*Registered Trade Mark

WOLMANIZED LUMBER



Toncan Iron has a Head Start

NON-COPPER-BEARING STEEL OR IRON

COPPER-BEARING STEEL

TONCAN COPPER MOLYBDENUM IRON

IN RESISTING RUST
AND CORROSION!

This chart is based on the Electromotive Force Series of Metals, the commonly-accepted, scientific demonstration of the relative "nobility"—resistance to solution, thus resistance to corrosion—of metals.

Right from the start, Toncan Iron Sheets have what it takes to resist corrosion—because Toncan Iron is an *alloy iron*. It is highly refined *open-hearth iron* with which the correct proportions of copper and *molybdenum* are alloyed to obtain the best rust-resistance of all ferrous metals in its price class.

Toncan Iron is *not* a copper-bearing steel. We make copper-bearing steel, too. But it's not like Toncan Iron—there's *nothing* just like it.

Because it is processed to Republic's *exclusive* formula—because it contains *molybdenum* (the element that endows many fine alloy steels with their excellent qualities)—because it has *twice as much copper* as the best copper-bearing steel or iron—Toncan Iron has a head start over all other ferrous materials in the battle against rust and corrosion. And the head start is more and more evident in tough service—when

Toncan Iron continues to last after other sheet metals have failed.

To serve your clients better in Construction for Victory, specify Toncan Iron Sheets for rust and corrosive applications.

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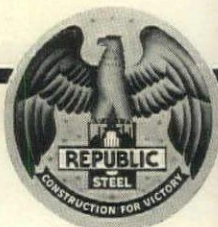
Write for the new book, "A Few Facts about Toncan Iron for Architects and Engineers"—and see Sweet's 13/6. Also see Section 27/3 for pipe; 23/5 for Steel and Tubes; 9/1 and 21/2 for Berger; 15/18 for Truscon Products.

REPUBLIC

Toncan Iron SHEETS

Reg. U. S. Pat. Off.

An alloy of refined open-hearth iron, copper and molybdenum—that grows old slowly





WHY YOU FIND
Linowall
ON A JOB LIKE THIS

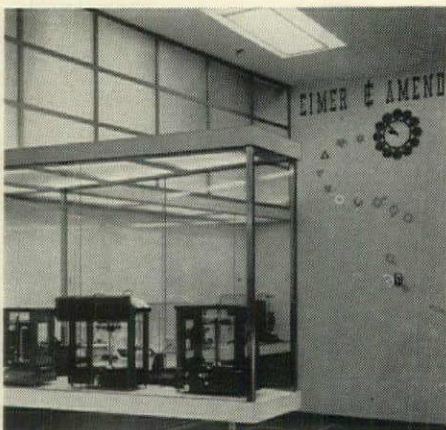
ARCHITECTS who have used Linowall know that it provides the style and color so essential in a modern wall covering. They have learned that it is a workable material—versatile and easy to install. And because of its versatility, architects have found this wall covering to be particularly adaptable to remodeling work of all types. That is why you see Armstrong's Linowall, more and more, in modern buildings of the calibre of this handsome Eimer & Amend showroom, designed by Morris Lapidus.

Equally important, it is easy to keep walls attractive when they are covered with this linoleum-like wall covering. For even in the busiest offices, showrooms, restaurants, and institutions, a damp cloth is all that's needed. No costly, troublesome refinishing is required.

So, whether your next job is new construction or remodeling, it will pay you to investigate the many advantages of Linowall—which is still readily available in a wide assortment of colors. For full details, see "Sweet's," or write for our color-illustrated, file-sized booklet. Address Armstrong Cork Company, Floor Division, 1204 State Street, Lancaster, Penna.



▲ Designed by Morris Lapidus, this simple, businesslike showroom of Eimer & Amend Drug Supply Company (shown above) demonstrates the use of Armstrong's Linowall on walls and columns. In the view below, note how the Linowall has been inset with a special design.



Linowall can be inset with wood, metal, glass, plastics, or carved linoleum, and at moderate cost. The interesting design shown on the wall above was achieved with linoleum insets.

ARMSTRONG'S LINOWALL

• MADE BY THE MAKERS OF ARMSTRONG'S LINOLEUM AND RESILIENT TILE FLOORS •

BOOKS

(Continued from page 100)

THE OLD BAY PATHS, by George Francis Marlowe, with photographs by Samuel Chamberlain. Hastings House, New York. 126 pp., illustrated. 5¼ x 8¼. \$2.

This is a story—or rather a series of stories—collected from the villages on the historic network of roads between Boston and Hartford. Today these roads are in part concrete highways, in part abandoned



paths through the woods. Among the towns touched upon are Wayland, Nobscot, Framingham, Windsor and Woodstock. The book is illustrated with about 50 excellent photographs. The building shown is the old meeting house at Lancaster.

THE A.I.D. 1942 ANNUAL, published by the American Institute of Decorators, New York. 28 pp. 8½ x 11½. \$4.50.

The yearly official publication of the national organization of decorators. It contains articles on A.I.D. activities during the past year, with particular emphasis on war work, British crafts, furniture



of the future and the influence of South America on U.S. interior design. Most interesting to the outsider is the portfolio of photographs of members' work.

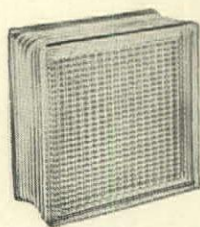
(Continued on page 104)

INSULUX *Daylight Panels*

**—Immediate Answer to
Window Repair
Problems**



INSULUX daylight panels are quickly installed by any bricklayer using ordinary tools.



**INSULUX gives better
light and insulation
INSULUX panels use
little or no metal**

When plant efficiency demands replacement of faulty windows, the logical solution is INSULUX Glass Block. *Little or no metal is required.* Precast concrete lintels save steel, and panels up to 50 sq. ft. need no wall ties. No painting is needed.

INSULUX daylight panels improve plant lighting. Prismatic block direct daylight deep into interiors. Yet INSULUX maintains full privacy.

The better insulation of INSULUX saves oil and coal, cuts heating costs. Ventilation can be provided by wood sash or louvers in the panels.

Installing INSULUX daylight panels means a more efficient, easily maintained plant now and after the war. Glass block are fireproof—noncombustible.

INSULUX Glass Block are available for *immediate delivery at economical prewar prices.*

Owens-Illinois Glass Company, INSULUX Products Division, Toledo, O.

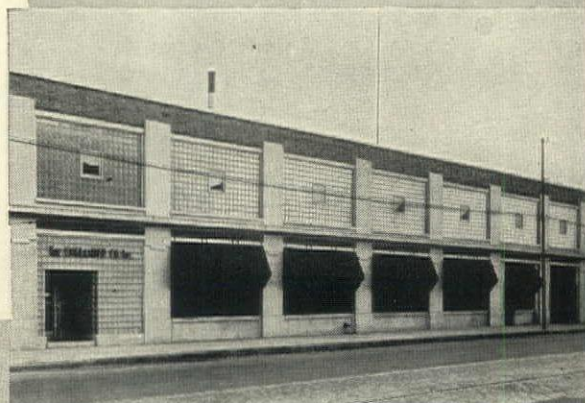
**OWENS-ILLINOIS
INSULUX
GLASS BLOCK**



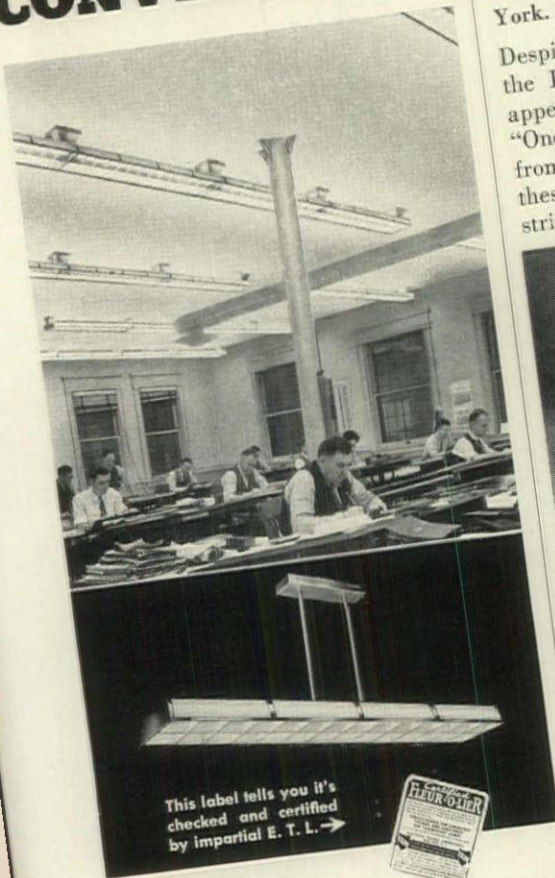
WRITE FOR THIS NEW BOOK ON INSULUX
It shows in detail how to replace windows with INSULUX, using minimum metal. Installations in all shapes and sizes of openings are illustrated.



Buildings above and below show how INSULUX Glass Block are used to bring old buildings up to top wartime efficiency.



NEW PLANTS? ★ CONVERTING?



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Plan for faster work in office or drafting room with Wakefield GRENADIERS

★ To get top speed in the plant, they need top speed in the office. For the "paper work" of office and drafting room guides and controls work in the shop.

And that's where the Wakefield GRENADIER can help you and your clients. Because the GRENADIER provides more light, fluorescent light; helps people see faster and better; helps them work faster; cuts eyestrain and fatigue. Mounted end-to-end, these units provide the pleasing effect of suspended troffers; with their functional lines of light; give smooth over-all lighting that makes every foot of floor space better working space; and permit quick installation.

You're doubly sure of dependable operation because the GRENADIER is made by Wakefield and because it's a Certified FLEUR-O-LIER . . . checked and certified by impartial Electrical Testing Laboratories. See our catalog in Sweets.

Our experience on priority ratings for fluorescent lighting is at your service

THE WAKEFIELD BRASS CO.
112 Forum Park • Vermilion, Ohio

B O O K S

(Continued from page 102)

DECORATIVE ART 1942, Edited by C. G. Holme. The Studio Publications Inc., New York. 28 pp. 8½x11½. \$4.50.

Despite the dislocations caused by the war, the Decorative Art Yearbook has again appeared. The editor states accurately, "Once again examples have been collected from all available sources, and although these sources are for the moment restricted, the material is of a remarkably



FIREPLACE EQUIPMENT, ENGLAND



TABLE ACCESSORIES, DENMARK



WOVEN PANEL, CZECHOSLOVAKIA

high standard." In addition to the illustrations there are two excellent articles on postwar possibilities.

THE ANSWER TO A WAR-TIME QUESTION



Q: How can we use dark, concealing paints and still minimize heat absorption?

A: SPECIFY ARCO **INFRAY***

Arco INFRAY avoids the excessive heat absorption of ordinary dark-colored paints because it reflects the heat-bearing infra-red rays of the sun. It can therefore be safely used to provide protective concealment for storage tanks and other vital structures customarily painted in highly visible white or aluminum. INFRAY—the original infra-red reflecting camouflage paint—is a wartime achievement of Arco Research.

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Paints for Industry



**Over 60,000 Fires a Year
START ON THE ROOF!***

**That's why you
need the fire
protection of
ASBESTOS!**

THE SAFETY OF YOUR PLANT against fire is not a matter of interior protection alone. If your buildings have inflammable roofs, they are exposed to a danger from *without* . . . the danger of the roof-communicated fire.

One of the best safeguards against this crippling menace is a Johns-Manville Asbestos Built-Up Roof. That's because the felts used are asbestos—which cannot burn. Laid up in plies, these felts form a flexible stone blanket that protects the roof structure from outside fires. Even flaming embers burn out harmlessly on a J-M Asbestos Roof!

And because asbestos also has the durability of stone, long exposure to sun, rain and weather have little effect on these roofs. Rotproof, they need no

periodic coating to withstand the sun's drying-out action, require little maintenance throughout their long life.

Get the Facts. You'll find them, in detail, in the 48-page illustrated book, "Things You Should Know About Your Roof." Write for your copy to Johns-Manville, 22 East 40th Street, New York, N. Y.

Johns-Manville
Asbestos
Built-Up Roofs

*The National Fire Protection Association has estimated that in 1940 (latest estimate available), 62,000 fires were caused by sparks falling on inflammable roofs.



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★ ENGINEERING
★ SERVICE

--for architects handling
priority projects

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If you have on your boards or in prospect any defense projects that require facilities for preparing and serving food to the armed forces or to essential industrial workers, send us your blue prints. We will relieve you of all detailing of this important and highly specialized work.

Beginning with your basic architectural plan we can make complete layouts of all food service departments; we design and manufacture the required equipment and supervise its installation, complete and ready for service.



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LETTERS

(Continued from page 22)

answered by careful valuation after this war period is closed. If the verdict is favorable, then the adjustments projected in your thesis will begin to work themselves out as a result of the new demands for modern housing. It is almost certain that the time factor can be shortened and developments hastened if public demand makes itself felt.

The questions raised by the use of modern methods and materials and consequent mass housing developments, so far as financing is concerned, have been pretty well integrated. Careful checking of experiences during the Post War I period in England has paved the way for efficient and reasonable rate adjustments for this vital service. The whole program of financing waits only the verdict of the consumer of mass housing to determine the trends of our Post War II period. . . .

FERMOR S. CANNON

Indianapolis, Ind.

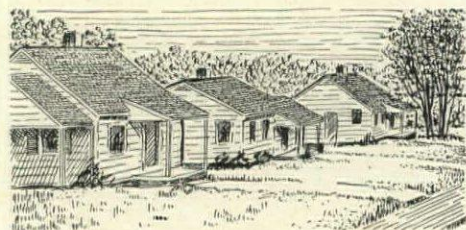
FORUM:

. . . This third article covers such a far-flung field of industry and finance that any attempt to make a critical comment runs into something in the nature of a book on the subject. And such a book would have to be devoted to discussion of the meaning of words. For, throughout the article, words that carry a very distinct connotation within the frame of capitalism—pecuniary valuation—are used as if they had definite meaning within the frame of technology, which they do not. "Liquidity" may be cited as a case in point. As an operation involving items of capitalization it is one thing, but extinguishing capitalizations and getting rid of the decayed and obsolete structures of our environment is quite a different process from that which is ordinarily associated with the word. There is no distinction drawn between technological and financial control, and so on.

In the analysis covering the past and in what is said of Post War opportunities, emphasis is given to our failure to liquidate the worn-out, the obsolete—which is a matter of the very first importance. In fact, it is the emphasis on this point which serves to differentiate this FORUM statement from many another. This emphasis serves to differentiate it as a program from such proposals as have been advanced by Hanson, Greer and others. For, as I understand their statements, they are not proposing to extinguish the current capitalization of decayed and urban centers, but rather to transmute them by some form of credit

(Continued on page 110)

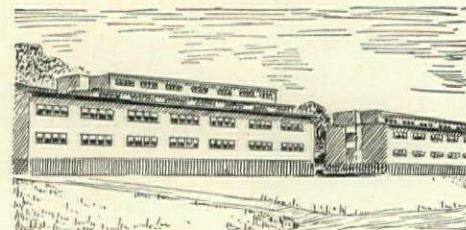
Doing the WAR JOBS



Industrial Housing



Barracks



Duration Dormitories

When labor is scarce and building hurried, call on Cabot's Shingle Stains for your war jobs. These stains are quickly and easily applied. They give maximum protection at minimum cost. And they do not peel or blister even when used on unseasoned lumber or before the building has dried out.

Booklet — Color Card — FREE

Write today for color card and your copy of *Stained Houses*, containing full information about Cabot's Creosote and Heavy-Bodied Shingle Stains. (Or look at our color card in Sweet's.) Samuel Cabot, Inc., 1278 Oliver Bldg., Boston, Mass.

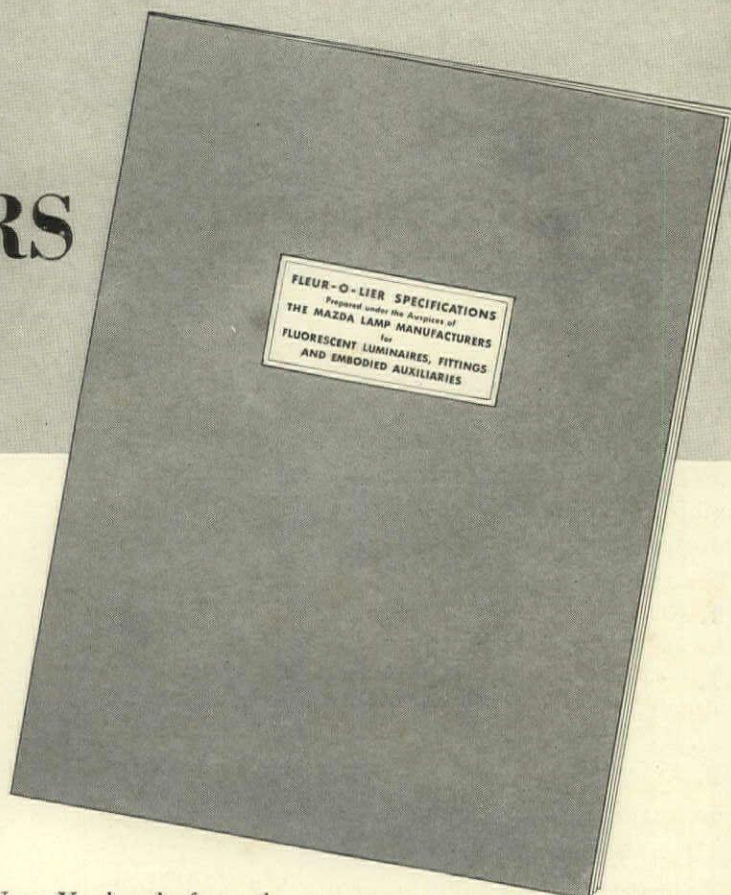
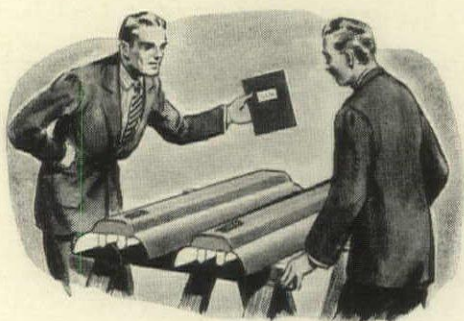
**Cabot's
SHINGLE STAINS**

Creosote

Heavy-Bodied

Planning war plant lighting? First get these specifications...

learn why FLEUR-O-LIERS are right!



1. These manufacturing specifications for Certified FLEUR-O-LIER fixtures have been written to protect those who *specify* and those who use fluorescent lighting. Skilled lighting engineers of the MAZDA Lamp manufacturers put their full knowledge into the setting up of these standards—to assure you of highly satisfactory service from fixtures and efficient performance from lamps.

2. No specifications are more complete. They cover not only reflectors but auxiliaries (ballasts and starters) as well—a full check on electrical, mechanical and lighting performance.

3. This information takes you “behind the scenes.” It gives you full details of how fixtures built to these specifications are tested and checked by Electrical Testing Laboratories,



Inc., of New York—before these impartial experts issue the right to use the famous FLEUR-O-LIER Certification Label. Over 40 leading fixture manufacturers are already making fixtures to these standards and participation in the program is open to *any* manufacturer who complies with the FLEUR-O-LIER requirements.

4. Plant engineers, architects, purchasing departments can have the full assurance that fixtures bearing the FLEUR-O-LIER label have been *Certified* by Electrical Testing Laboratories as meeting all of these specifications—making unnecessary any further test or check by the user.

★ *A request on your business letterhead will bring the actual fixture specifications to you promptly. Write NOW to FLEUR-O-LIER MANUFACTURERS, 2119-11 Keith Bldg., Cleveland, Ohio.*

Covers such important points as:

Efficiency—safety—
construction—finish—
brightness—flicker
correction—listed materials—high power
factor—ballasts and
starters—temperature rise.



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CERTIFIED FIXTURES FOR FLUORESCENT LIGHTING

Participation in the FLEUR-O-LIER MANUFACTURERS' program is open to any manufacturer who complies with FLEUR-O-LIER requirements

HERE'S A TIP -- Post-war specifications will consider WATERPROOFING as ONE "job"



WATERPROOFING should be PLANNED—it should be covered in ONE division of the specifications. Responsibility of materials should be centralized in ONE manufacturer and application in ONE waterproofing contractor. Many architects already following this procedure, have gained the following practical advantages:

1. Simplification of specification and greater ease in coordinating plans and spec.
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3. A higher standard of waterproofing workmanship and the maximum of effective cooperation between Architect, General Contractor, Waterproofing Contractor, and Manufacturer.
4. Better final results at lower cost and with greater protection to the owner.



MINWAX—offering a complete service: DAMP-PROOFING, SPANDRELS, CAULKING—is frequently specified as the preferred manufacturer, for MINWAX products cover ALL waterproofing needs.

See Sweet's (section 17)

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New York
W. K. Harrison, J. A. Foulhoux,
Architects

MINWAX Spandrel, Waterproofing,
Trowel Dampproofing, Caulking
Compounds, used.

MINWAX CO. INC.

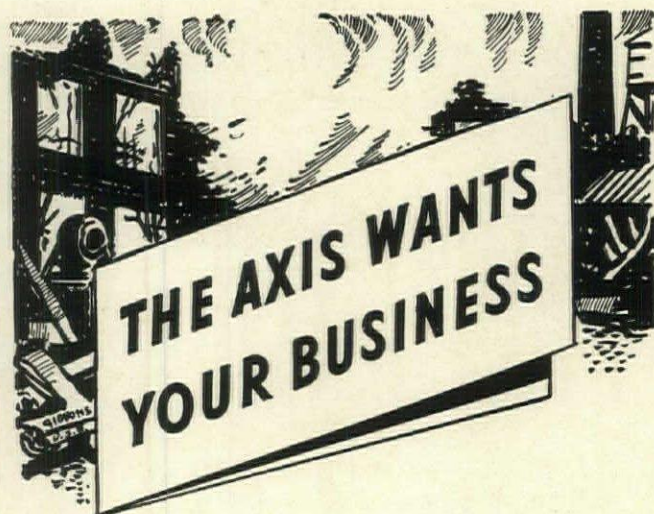
11 West 42nd Street, New York



Waterproofings
Dampproofings
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Wood Finishes
Waxes
Protective Coatings

COMPLETE CATALOGUES IN SWEET'S



THIS is more than a war of mechanical monsters clashing in the night . . . more than a war of production.

It is a war for markets—your markets! The Axis wants your business—wants to destroy it once and for all.

With so much at stake, there is no doubt you will want to do everything you can to meet this Axis threat. Two ways are open: Speed production and put 10 per cent of your income into WAR BONDS! The only answer to enemy tanks and planes is *more* American tanks and planes—and your regular, month-by-month purchases of War Bonds will help supply them. Buy now and keep buying.

THE GOAL: 10% OF EVERYONE'S INCOME IN WAR BONDS

When you install the Pay-Roll War Savings Plan (approved by organized labor), you not only perform a service for your country but for your employees. Simple to install, the Plan provides for regular purchases of War Bonds through voluntary pay-roll allotments.

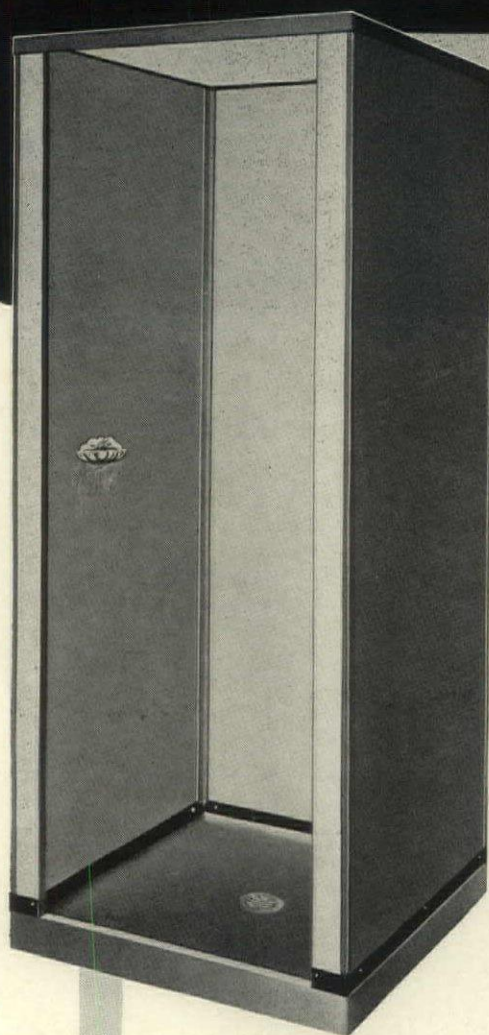
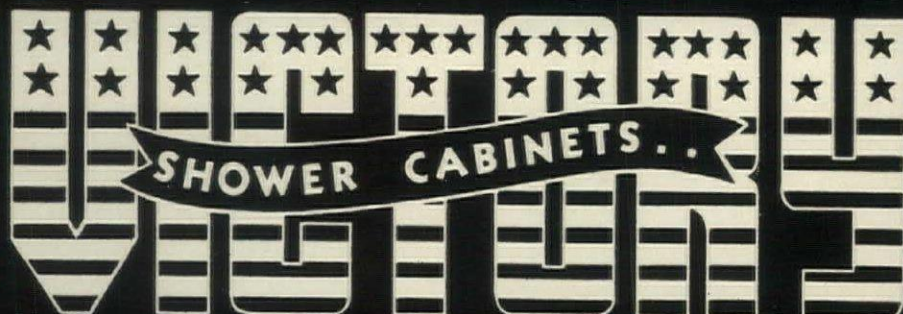
Write for details today! Treasury Department, Section R, 709 12th St. NW., Washington, D. C.



War Savings Bonds

This space is a contribution to Winning the War by
THE ARCHITECTURAL FORUM

Bathe-Rite



SAVE INSTALLATION MAN HOURS on IMPORTANT BUILDING PROJECTS . .

Architects and Contractors responsible for completing War Housing and Government Building Projects on time are saving HUNDREDS of vital MAN-HOURS with BATHE-RITE VICTORY SHOWER CABINETS . . . And are providing truly modern, attractive bathing facilities that win immediate and enthusiastic approval.

Bathe-Rite VICTORY Showers have exclusive quick-assembly features that cut installation time 25% or more per unit — even with unskilled help. To the Contractors, this means MORE Showers installed in LESS time and at lower cost . . . A Contribution to Victory possible only because of Bathe-Rites long experience, precision-manufacturing facilities and complete knowledge of prefabricated Shower needs.

Two Standard Models -- for Every Need --

Bathe-Rite Prefabricated "VICTORY" Cabinets come in two sizes (30 x 30 x 75", 32 x 32 x 75"), and meet ALL Wartime specifications of U. S. War Department and Federal Public Housing Authority. Packed for easy handling and assembly.

WRITE OR WIRE FOR PRICES AND DETAILS

Give name of project and quantity required. Delivery assured on any quantity, when and where needed.

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Milwaukee, Wisconsin

★ ★ QUALITY-BUILT by BATHE-RITE ★ ★

LETTERS

(Continued from page 106)

hocus-pocus into items of national debt which will be rated as wealth by those who hold these items of investment. I may have this wrong: I am not positive about this point: maybe the authors of the FORUM article intended that "liquidate" meant the sinking without trace of pecu-

niary capitalization of the decayed and obsolete. That's what it should mean.

FREDERICK L. ACKERMAN

New York, N. Y.

Forum:

... There is one aspect of the mass production of housing which has been under-emphasized. This is the aspect of community appearance. We are all familiar with the unpleasant quality of many large-scale housing projects developed both by private and public enterprise. We are only

too familiar with the monotony and the dullness of the large subdivision of small houses, and we are well aware of the fact that the unattractive appearance of these new sections of our communities is due not only to bad architectural design but also to bad community planning. We are also aware of the fact that a badly designed community has a short economic life.

If we consider the postwar community as a totally new entity built as a temporary place of residence and work in which an even more mobile population than we have today is to raise its families and conduct its business, then we must plan our mass production to the best interests of this goal. If, on the other hand, we are to consider it more important to stabilize our communities and build our social and economic life around the fixed points of established industry and commerce with the full employment on a long-term basis, then the mass production of houses will of necessity achieve a different character. . . .

CARL FEISS

Denver, Colo.

WAR HOUSING

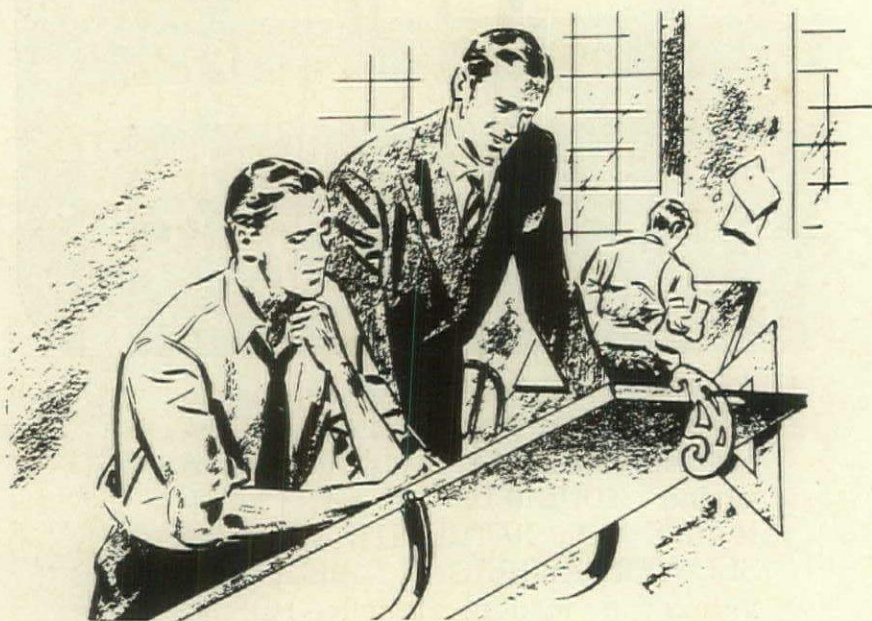
FORUM:

There are a number of valid reasons why factory-fabricated houses ought to be given an increasingly large place in the War Housing Program. These reasons are: they are quickly set up in the field without bringing large numbers of building mechanics to already overcrowded communities; they use less critical materials because there is less waste in the operation and because the houses are engineered instead of "drawn"; they allow temporary overcrowding of land to conserve utility connections; they allow projects of houses built on scattered lots already served by utilities; they allow units to be moved away after the war and put in use where they are needed; and they are cheaper.

The above reasons are not immediately apparent, and there are those interests that are inclined to be antagonistic to prefabricated houses. Many architects feel that they are being cut out of work. A number of general contractors disparage the merits of prefabricated houses. Many craft unions feel that prefabrication breaks down the craft lines. Others have simply seen houses originally bought by Rufe Newman early this year and not yet completed and, not knowing of the bog down of the Housing Section of WPB, simply conclude that fabricators have fallen down on the job.

At present the house manufacturers are not presenting a clean cut exposition of the reasons for factory fabrication. Those in charge of housing programs hear only garbled reports and arguments, and they

(Continued on page 112)



How You Can Help to Meet War-Emergency Conditions

You can help to conserve scarce motors and critical metals by specifying Sedgwick Hand Power Elevators and Dumb Waiters whenever possible. War needs for Sedgwick electric equipment make it impossible to fill normal requirements. But Sedgwick Hand Power lifts are so well designed and constructed as to offer exceptional operating advantages, and unequalled economy in maintenance and use.

SPECIFY Hand Power SEDGWICK DUMB WAITERS

for food service, supplies, garbage disposal in canteens, mess halls, hospitals and other institutions, and for any special needs where loads do not exceed 500 lbs.

SPECIFY Hand Power SEDGWICK ELEVATORS

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We invite consultation and offer fullest cooperation in connection with any problem related to vertical lifts.



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Established 1893
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DUMB WAITERS ~ ELEVATORS

START PLANNING NOW FOR SLOAN-EQUIPPED HOMES



The modest home which most of us envision as our dream house of tomorrow, will be different in many ways from the homes of today—and Sloan engineers are going to have their contribution ready at the dawn of that tomorrow, for even now they say:

"Heretofore Sloan Flush Valves were specified for only luxury homes, large apartments, hotels, hospitals, schools, institutions and other types of large buildings; but here is our promise to you today—

After the War there will be Sloan Flush Valves with all their well-known advantages for modest homes and inexpensive walk-up apartments."

For 36 years Sloan Flush Valves have proved their trouble-free durability with astonishingly low maintenance cost. They protect health by preventing back-syphonage—They save water—They are quiet—They are the accepted standard-of-excellence by which all other flush valves are judged.

So start planning now for Sloan-equipped homes. With Sloan Flush Valves you provide home owners with the ultimate in convenience, health and economy. Remember: there are more Sloan Flush Valves sold than all other makes combined.

★ ★ SLOAN VALVE COMPANY ★ ★

4300 WEST LAKE STREET • CHICAGO

LETTERS

(Continued from page 110)

cannot be blamed for falling back on methods with which they are familiar; they have a job to do. The organizing of FPHA has led to confusion; many officials have not yet realized that they are no longer building slum clearance projects for 60-year amortization; many have never worked on light construction; many have simply been rushed into a job without any clear-cut idea of the program they are working on. This situation is rapidly

clearing up as the new organization is integrated and plans and executes its own work. . . .

FRANK M. ROBERTS

Chevy Chase, Md.

SUPERINTENDENT SPEAKS

FORUM:

Periodically you give us something about our particular field [hospitals], but thus far we have looked in vain for any floor plan that indicated the architect knew very much beyond his fundamental knowledge of beam stresses or the usual floor plans for dwelling houses or office buildings. Not a one of them displays consistent study of the all-important and very expensive

labor factor, most of it nursing, consuming some 65% of all income. Utility rooms and other conveniences for the nurses often are placed from fifty to one hundred feet from their stations, and rooms and wards instead of being grouped around their stations within fifty feet are spread out in straight lines to one hundred fifty feet, causing a large part of their day to be spent in travel to and from the sick person instead of devoting all possible time to him.

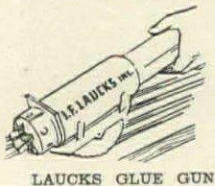
The modern surgery is the busiest of any department of a hospital and more travel is necessary here than in any other. Yet we have failed to find any published design different from those in use one hundred years ago. Operating rooms continue to be strung out in corridors a hundred feet or more long instead of being arranged in a hollow square with all facilities for the personnel in the middle that would cut down travel and fatigue by at least one-third, to say nothing of increased efficiency.

In fully 90% of all hospital construction, no thought has been given to visitor or personnel travel. Garbage and soiled linen, surgical cases, the quick and the dead, are supposed to mingle freely through the main corridors, and elevators have common landings. Elevators especially are among the most costly luxuries of such institutions. The upkeep on even one means the interest at 2% per annum on \$50,000, enough to pay for a lot of roof if the building is limited to one or two stories as it should be, thereby eliminating a huge waste of time in waiting for elevators.

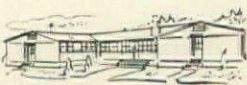
Because doctors and nurses know little or nothing of design or reading blueprints except that a surgery, laboratory, X-ray department, some rooms for the sick, and a locker room and toilet or two are necessary, architects give them the "works," putting on costly ornamental cornices and other trim, quarter roofs of tile that blow off in a deadly shower during high winds, funereal foyers, Italian renaissance entrances, and especially fancy front stairways at the entrance. Most of the architects go wild on stairways. Evidently they think a hospital will go bankrupt unless it has a stairway on which visitors or patrons can break arms and legs. The climax is seen in a Pacific Coast city where the taxpayers had to put up a regal marble staircase and entrance costing them some \$100,000 with over a hundred steps. Relatives or friends with heart trouble or asthma dare not attempt visiting their sick. Perhaps this is the reason for the stairs!

Like the Pharaohs of Egypt, promoters, doctors and architects have been erecting huge pyramids of concrete and steel to stand for the next millenium, evidently concluding that all wisdom in construction will die with them, whereas, judging by every indication, the hospital that used everything ultra-modern in materials and design in 1940, will be as obsolete in 1960

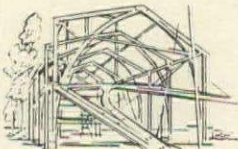
(Continued on page 114)



LAUCKS GLUE GUN



LAUCKS GLUE FOR PREFABRICATED WARTIME HOUSING



LAUCKS GLUE LAMINATED ARCHES FOR U. S. ARMY CHAPEL



THESE LAMINATED ARCHES for army air force hangars . . . safe and sturdy, saved tons of steel for combat duty, speeded up erection and proved again what wood and Laucks glue can do in wartime construction.

The beams for this hangar represent only one of many jobs erected by a famous fabricator of laminated arches and beams, who has standardized on Laucks Construction Glues.

Whether you're interested in laminated arches and beams, stressed cover structures, prefabricated housing, dry-built construction, or some other type of wartime work where wood and glue are important . . . get in touch with Laucks, the world's largest manufacturers of water-resistant and water-proof glues and resins. Write, wire or phone . . .

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I. F. LAUCKS, LTD., Granville Island, VANCOUVER, B.C.
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★ Don't forget, LAUX REZ, the pioneer resin sealer and primer, protects wood as rust-proofing protects metal.

LAUCKS CONSTRUCTION GLUES
Consult LAUCKS—America's Glue Headquarters

Concrete *saves steel, transportation, time*



Warehouse for large eastern naval air station. Designed by Bureau of Yards and Docks, Washington, D. C. Virginia Engineering Company, contractor.

The peace-time developments that brought concrete from a purely structural to a highly regarded architectural material, are helping to build rugged, hazard-resistant war buildings with a minimum of steel and transportation. The bulk of concrete material is usually found locally. Simple construction methods and local labor speed the job.

To help get the maximum service which Architectural Concrete can render, the Portland Cement Association's technical staff is available to assist designers and builders of major war structures. Do not hesitate to call on us. See Sweets 4/45.



PORTLAND CEMENT ASSOCIATION

Dept. 11-7, 33 W. Grand Ave., Chicago, Ill.

★ BUY WAR SAVINGS STAMPS AND BONDS ★

LETTERS

(Continued from page 112)

as those today built in 1920. Air conditioning alone has changed the whole exterior and interior concept of a hospital, and in five years has depreciated even 1930 design by 50%. That is, of course, if the architects have caught up with air conditioning. We haven't seen or heard of one yet who speaks intelligently on the subject. They leave it entirely to specialty engineers employed by the larger refrigerating companies, and the engineers not

being employed by the hospital, put in what they choose. Self-styled experts in the field of hospital construction still tell us that air conditioning is yet in an experimental stage! For California at least, the initial cost of full air conditioning equipment is no more than for the antiquated low pressure steam and radiator system. And the operation of a hundred-bed or larger hospital can be entirely automatic with no attention except to oil the motors or change the filters.

Specialized departments as well are left to the agents of vendors. Kitchens, laundries, X-ray and laboratory suites, or their functions, are absolute Sanskrit to the architect. Therefore he takes the easiest

way out and leaves them to others who know little more except to sell the equipment for their firms who take their commissions, the contractor and the architect theirs, leaving the administrator who generally is hired the last thing before the building is opened to struggle along the best he can with the whole mess, or change it when funds permit.

Mechanical features suffer with the rest. Piping of all kinds is furred behind expensive ceilings until it begins to leak. Vertical lines are run through room walls that rot or burn all the time. Costly linoleum is laid on grade floors to rot out in a year or two. One leading architect of San Francisco planned at least two large hospitals with the soiled linen chutes opening in the hall directly in front of the main dining room for personnel! In our own general hospital of 225 beds, all of 400 square feet was every bit of space allowed for all kinds of stores, whereas at least 50 square feet per bed is necessary to allow purchasing in quantities, and for spare furniture, bedding and equipment.

It is our most emphatic conclusion that no hospital for care of "acute" or surgical cases, should be built for primary use as such, for a period exceeding *twenty* years.

In the hospital construction of 1945-50, further development in air conditioning, ultra violet sterilization of air, and use of cheap aluminum, manganese, plastics, glass, new wall coverings and advanced furniture design, will make obsolete any prewar building, not to speak of mechanical advances in automatic machinery of all kinds, piping, wiring and lighting.

Were it not for the fact that this colossal bungling, principally the fault of doctors and architects, raises by 15 to 30% the cost of illness for the sick person, nothing need be said except in sympathy for the employees who have to walk most of the time instead of caring for the sick or for the managers who must struggle with the everlasting interest and debts.

But when it can be proved without the aid of any slide rule that all this unnecessary overhead keeps thousands from adequate care, bankrupts thousands more by huge hospital bills, and adds eternally to the tax burden, the whole adds up to criminal carelessness and folly.

The only remedy is voluntary self-education of the architect to the specialized needs of every department through most careful observation, and frequent consultation with those who have to live with his mistakes. He, after all is said, is the captain of the ship in construction. He can avoid the waste, the useless frills, anything but the bare essentials. He should be the one alive to every advance in design or material. Upon him is the responsibility for the misery he causes in higher costs for millions who yearly must go to a hospital.

R. D. BRISBANE, Superintendent,
Sacramento, Calif. Sutter Hospital

The Sponsors of Fibber McGee and Molly make good paint, too!



JOHNSON'S Wax-Fortified Paints

Mill White Gloss
Mill White Flat
Commercial Interior Gloss
Commercial Interior Semi-Gloss
Commercial Interior Flat
Dado & Machine Enamels, etc.



Made by the makers of Johnson's Wax

More and more Architects are specifying Wax-Fortified Paints for their extra service features

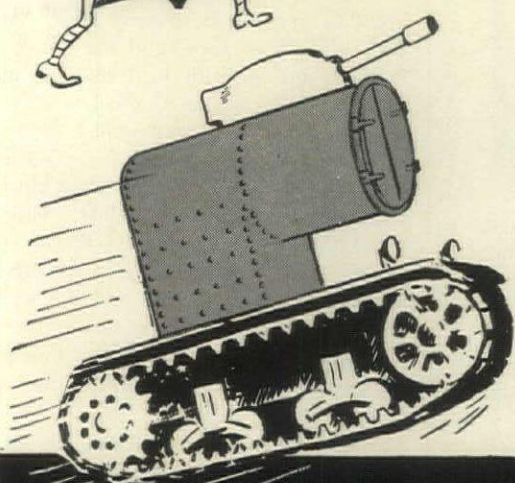
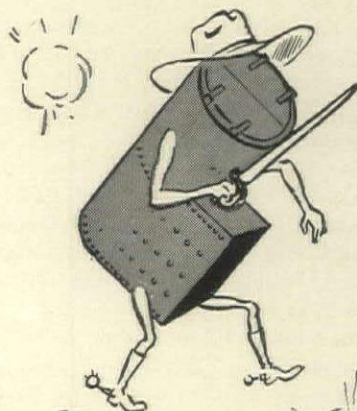
In these days when both manpower and materials must be conserved, Johnson's Wax-Fortified Paints have special advantages. These paints, which are impregnated with genuine wax, dry to leave a wax-smooth

surface that repels dirt . . . resists marring . . . maintains its light-reflective values longer. Because these truly modern paints reduce maintenance costs significantly, architects can recommend them to clients who are on the alert for superior paint service. Write today for new booklet, "The Why and What of Wax-Fortified Paints."

S. C. JOHNSON & SON, INC.
Industrial Maintenance Division

Dept. AF112, Racine, Wisconsin

Is this your first war?



It isn't ours. Nor our second. Nor our third, unless you don't count the Philippine insurrection which was small maybe, but plenty tough. Nor even our fourth, if you include the Indian wars — which you would, if you'd been in them. Ask the shades of Custer's troops.

Anyway, we started making Fitzgibbons Steel Boilers when the Grand Army of the Republic was stepping out right pert and lively, still young. And we haven't stopped making them since, through wars, depressions, pestilence, or what have you.

Survival has become a habit, with Fitzgibbons. Like the race of Man, so designed by nature as to outlast the mastodon. We like to believe that Fitzgibbons Steel Boilers were also correctly designed at their inception, and, backed up by an organization which has long proven its ability to stay young and virile, will still be manufactured long after the present world upheaval has subsided.

Fitzgibbons is in this war a lot deeper than we were in any of the others, making queer things to come out of a boiler works. But we're making steel boilers too — and we intend to be still making them when the veterans of World War II are graybeards.



So far as we may, Fitzgibbons will work to help you maintain Fitzgibbons Steel Boilers and Conditioners now in operation. The cooperation of our Service Department is offered wholeheartedly.

Fitzgibbons Boiler Company, Inc.

101 PARK AVENUE, NEW YORK, N. Y.

WORKS: OSWEGO, N. Y.

BRANCHES AND REPRESENTATIVES IN PRINCIPAL CITIES

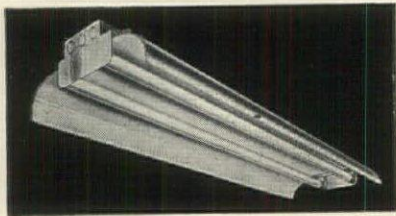
★ BUY U. S. WAR BONDS

FITZGIBBONS

Building Reporter

(Continued from page 8)

for easy trouble shooting, and bump-proof end-plates which extend behind the lamp-holders for added protection to these parts

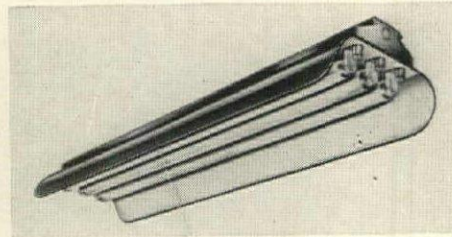


during transit, installation and servicing. Designed for 2-40, 3-40 and 2-100 watt fluorescent lamps.

Manufacturer: Edwin F. Guth Co., 2615 Washington Blvd., St. Louis, Mo.

Name: V-Series Day-Line Units and Continuous Fixtures.

Features: Incorporate reflectors of pressed

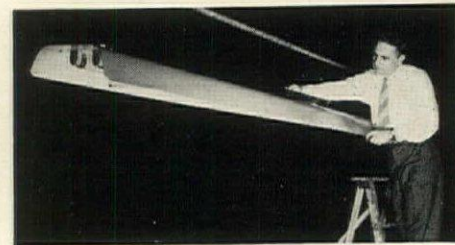


board that is given a 325° baked enamel finish. Reflection factors of well over 80% have been obtained.

Manufacturer: DayBrite Lighting Inc., 5411 Bulwer Ave., St. Louis, Mo.

Name: Sequence-Starting Circuit.

Features: New fluorescent circuit uses

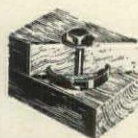


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Plans of 45 representative types of timber structures are included. You will be interested in the wide range of structural possibilities featured, as created under the TECO System of timber construction; also in TECO's savings of time, materials, and money.

Write us now . . . before the present supply is distributed.



The TECO Ring Connector spreads the load on a timber joint over practically the entire cross-section of the wood.



Timber ENGINEERING COMPANY

WASHINGTON, D. C. PORTLAND, OREGON

only one ballast (or control unit) with four 100-watt fluorescent lamps in place of present fixtures which require two ballasts for four lamps. Operates on 254, 265 and 277 volt circuits. The two lamps on each phase of the new circuit start in sequence and operate in series. Thus, one ballast does the work of two, effecting important economies.

Manufacturer: General Electric Co., Nela Park, Cleveland, Ohio.

INSULATION. Glass fibers replace aluminum in lightweight, fireproof, rotproof, vermin-proof board.

Name: Glass Fiber Board.

Purpose: For use as heat insulation and an interior finish for fighting ships and auxiliary vessels.

Features: Developed as part of the Navy's program to save critical materials in the construction of ships, the new board is made of compressed glass fibers treated with a binder. On the service side it is faced with incombustible glass fiber cloth which is applied to the board with flameproof cement. The board is secured to steel surfaces with an adhesive. Joints between individual boards are covered with glass fiber tape, and the entire surface is finished with lead and oil paint. The insulating value of the board is due to the millions of entrapped air cells, and to the fact that where the glass fibers cross and touch each other they have exceedingly fine contact points, with the result that heat cannot pass readily from one fiber to another. It is unaffected by dampness or salt water, and the surface is easily cleaned. Since the entire output is being used by the Navy, this product is not commercially available at the present time.

Manufacturer: Owens-Corning Fiberglas Corp., Toledo, Ohio.

EXTERIOR WALL SURFACING material developed to take place of corrugated metal siding.

Name: Certain-teed Mineral Surfaced Siding Board.

Purpose: For use where a flat semirigid, (Continued on page 118)

Modern Structural Members For Your Next Job

**Lumber + Glued Lamination + Teco Connectors
give you any type of beam, arch or truss!**

New methods of joining lumber make available to architect and engineer, modern factory fabricated structural members engineered for specific jobs.

Teco Connected Trusses are made for spans up to 100 feet and more. The Teco Connector makes it possible to utilize 80% or more of the working strength of lumber, with a consequent reduction in the size of timbers. Teco metal connectors effect a significant saving in steel by eliminating the use of heavy gusset plates, bolts and rods.

Glued Lamination has changed all former concepts of joining and using timber framing members. Carefully selected kiln dried and seasoned lumber is built-up, shaped, formed and securely and permanently bonded with modern structural glues, into strong, graceful roof supports or structural members that are continuous from foundation to roof peak.

Post-free spans up to 200 feet and over are being built with glued laminated beam arches. Ply beams are being used in flat roof structures of one and two stories. They require no enclosing and lend themselves to unusual finishes.

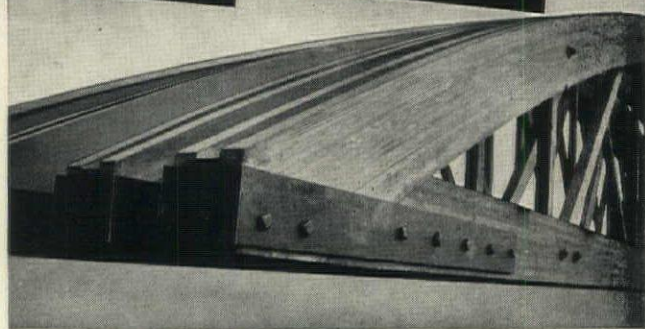
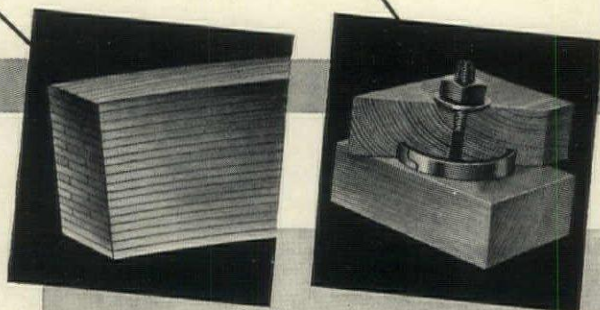
These Modern Timber Structural Members are engineered for specific jobs to meet Army, Navy and Building Code requirements. They are factory fabricated under rigid controls and delivered to the job site for ready erection. Complete engineering and design service are available. Write today for complete information.

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WEYERHAEUSER SALES COMPANY

First National Bank Building

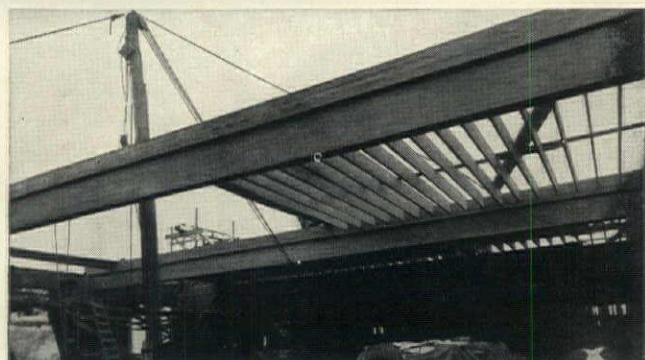
Saint Paul, Minnesota



Typical Glued Laminated Bowstring Trusses, Teco Connected.

At Left — Roller Skating Rink, York, Pa. Glued Laminated Parabolic Beam Arches, span 90 ft.

Below — Coca-Cola Bottling Works, Albert Lea, Minnesota. Glued Laminated Ply Beams used in flat roof span 65 feet.



Building Reporter

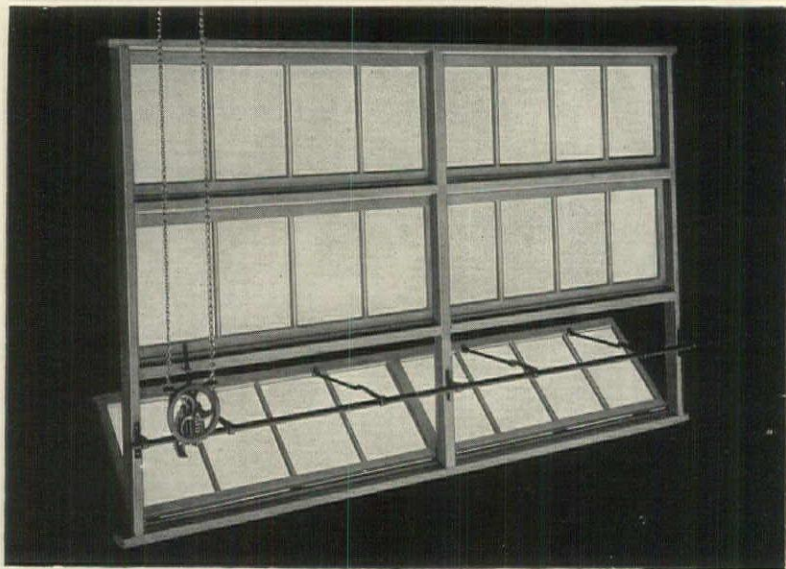
(Continued from page 116)

waterproof, fire-retardent material is desired.

Features: Has no corrugations but is a laminated, asphalt-saturated felt, covered on one face with colored mineral granules. May be applied with a vertical joint, filled with plastic cement, and covered by

wood batten strips, or by dutch lapping, 3 in. sidelap and 3 in. headlap. The siding should be nailed over studs placed not more than 24 in. o.c., with horizontal nailing girts or strips between the studs, also spaced not more than 24 in. o.c. Individual sheets are 36 and 48 in. wide and are provided in lengths of 6, 7, 8, 9 and 10 ft. Single sheets range in weight from 18 to 42 lbs.

Manufacturer: Certain-teed Products Corp., 120 South LaSalle St., Chicago, Ill.



Standard Side Wall Sash. One or all may be operative. Note sight lines are the same for fixed glazing and operative sash.

Cypress

INDUSTRIAL SASH

The Most Durable and Practical Window Units Available

Built for lasting service and minimum upkeep. Sash of clear heart Tidewater Cypress—tank grade. Frames of clear heart California Redwood, complete with hardware and mechanical operators. Everything for the window opening ready for quick installation with the least amount of carpentry work on the job.

Sash are top hung swinging out for trouble-free operation. Extra-heavy hinges at the top, and operator bearers at the bottom, support the sash in a straight plane from

its strongest members. It cannot warp, twist or bind.

Time-Tested—We have installed hundreds of miles of this sash on greenhouses and other buildings where minimum heat losses and weather-tight construction are essential. Installations made more than 50 years ago are in excellent operating condition.

Engineering service available at all offices. Catalogs and detailed drawings give time-saving information. . . . Ask for copies.

LORD & BURNHAM COMPANY

Established Since 1856

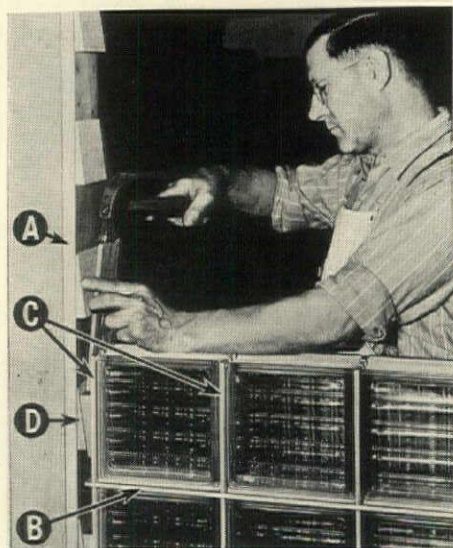
420 Lexington Avenue, New York, N. Y.

Irvington, N. Y.
Boston, Mass.

Philadelphia, Pa.

Des Plaines, Ill.
Cleveland, Ohio

INTERIOR WALL. Prefabricated wood strips form flexible, salvageable glass block partition.



Name: Glass Block and Wood Strip Interior Partition.

Purpose: To provide a completely packaged, easily erected, demountable, interior partition employing no critical materials.

Features: Goes up quickly and simply. A wood frame (see A) is first erected to accommodate the new partition where it meets adjoining walls, floor and ceiling. The glass block partition is then set up, with prefabricated wood moldings holding the blocks in position. These wood moldings are of two kinds: horizontal (see B), and vertical (see C). The raised ridges on the faces fit snugly into the flutings on the edges of the glass blocks. Notched ends of the vertical moldings lock over the ridges on the horizontal moldings. A third prefabricated wood member consists of paired wedges (see D). Half of each pair is nailed to the wood frame of the opening at the height of each course. The other half is then tapped lightly into place. This completely interlocks the blocks, moldings and wedges, and holds the entire wall securely in place. Almost any size wall can be constructed. Walls may extend from floor to ceiling, or be waist or head high. They may reach from wall to wall, or have one end free, as in a wing partition. Doors or windows may be inserted in the wall at any point.

Manufacturer: Insulux Products Div., Owens-Illinois Glass Co., Toledo, Ohio.

CONVERSION UNIT. Manual stoker uses an occasional pull on the lever to advance partially consumed coal towards the dump plate.

Name: American Hand-Operated Self-Cleaning Stoker.

Purpose: To replace commercial and industrial oil-burning equipment.

Features: Employs the basic "Cokal" firing principle which has been used with

(Continued on page 120)



What a challenge to tomorrow's builders!

THERE are two sides to every question. In the picture above you see the effects of wanton, tragic, useless destruction. But look further. Doesn't there begin to come to your mind the vision of how you would rebuild—of the light and air and beauty with which you could transform that ugly, crowded waste? Man's greatest claim to hope lies in his eternal urge to build again—and better.

Bombs may never level cities in our own fair land. But the hand of builders will. Vast, crowded areas wait to be reclaimed. Housing may be a puny orphan of the war, but fed by neglect it

will emerge a giant. Sooner or later, the pent-up demand for shelter will break like a storm under a release of materials. Then, you, the creative planner, will come into your own.

And ready to your hand, will come the steel with which to build—stronger, safer, more beautiful. For war's insatiable demands have vastly stimulated research and revealed a whole new range of possibilities.

Forced as you are today by the war emergency to forego its use as fully as possible, there is no barrier to your planning for tomorrow. Steel will be back more plentiful and versatile than ever.

HOW STEEL IS IMPROVING CONSTRUCTION

Faster, cheaper construction. Better ways to use steels have resulted in buildings being completed months ahead of schedule, with large savings in costs.

Stronger, more flexible construction. New methods of fabrication with steel make buildings more resistant to explosions, fire, earthquake, lightning and storms of all kinds.

More durable construction. Steel can be made as corrosion-resistant as you want by proper alloying or surface treatment. U.S.S. Stainless Steel, COR-TEN, Copper Steel, VITRENAMEL, Paintbond, Dul-Kote, Terne plate, Galvanized steel—all have different degrees of corrosion resistance making them suitable for particular jobs.

Better designs in steel. Architects are contributing immeasurably to the better use of steel. Business buildings, factories, homes are not only practical, but beautiful when correctly designed with steel.



CARNEGIE-ILLINOIS STEEL CORPORATION, Pittsburgh and Chicago

COLUMBIA STEEL COMPANY, San Francisco

TENNESSEE COAL, IRON & RAILROAD COMPANY, Birmingham

Scully Steel Products Company, Chicago, Warehouse Distributors

United States Steel Export Company, New York

UNITED STATES STEEL

Building Reporter

(Continued from page 118)

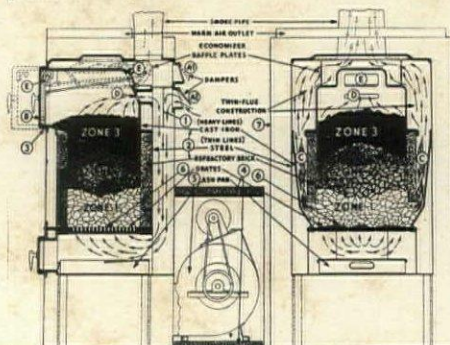
success in thousands of plants. Users report ability to maintain high CO₂ and carry loads as high as 150% to 200% of rated capacity with practically all kinds and sizes of bituminous coals. No drop-off in steam pressure during firing or removal of ashes. In feeding, the coal is placed on the front of the stoker and advanced downward and backward towards the dump plate by an occasional pull on the lever which tilts the step-like grates. A separate dump bar releases the dump

plate and discharges ashes into the pit without disturbing the fire. Volatile gases given off by the green fuel at the front of the furnace are completely consumed in passing over the hot coke in the rear. Natural draft (no fans or motors) is unaffected by power failure or "blackout" cut-off of power. Fires are easily banked for long periods. Fuel is conserved since fires can be cleaned with fire door closed, and no clinkers are formed. All grate bars in each individual section of stoker are operated simultaneously. Each bar is locked in the side frames with removable clips which prevent the bar getting out of place. Grate bars are balanced to eliminate effort when advancing coal toward rear of furnace. Can be installed

in a day's time. Available in sizes suitable for firing any quantity of coal from 100 lbs. to 4,000 lbs. per hr.

Manufacturer: American Coal Burner Co., 18 East Erie St., Chicago, Ill.

HEATING. Advantages of furnace incorporated in space heater.



Name: Viking Self-Stoker.

Purpose: To provide low-cost heat from coal or coke.

Features: Manufacturer maintains that this completely self-stoking unit operates very efficiently because unburned gases are forced back through the fire before passing up the chimney. Other advantages claimed: it is necessary to build only one fire a year; furnace needs filling once a day or every other day; slow-burning bed of coal produces sufficient heat without clinkers. Ashes should be emptied daily. Unit has combination control of heat output which also, it is claimed, prevents runaway fires, saving coal. Thermostatic control may be had, if desired. Burns inexpensive grades of fuel, domestic stoker size or smaller are the most satisfactory. The "Formudux" used for all ductwork saves critical metal and has high insulating qualities. Constructed from a selected combination of refractories, cast iron, heavy gauge steel. Cabinet is of 20-gauge steel with 26-gauge inner liner; flanged 1½ in. or duct connection; finished in grained gray enamel; height 45 in.; width 32 in.; depth 22½ in.; rating 37,500 to 55,000 Btu. capacity.

Manufacturer: Viking Mfg. Corp., 1234 Ray St., Dayton, Ohio.

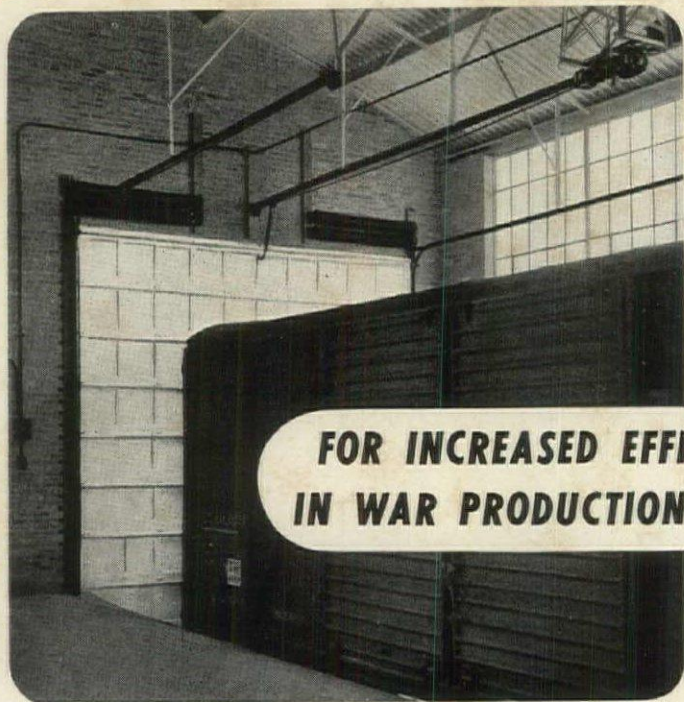
RESIN ADHESIVE. Durable, water-resistant bond withstands heat, cold, fungus.

Name: Uformite CB-551.

Purpose: Designed for aircraft assembly work, marine construction, structural fabrication, furniture construction, self-retentive and clamped joints, lumber core gluing, curved construction of all types.

Features: This improved urea formaldehyde resin adhesive replaces previous Uformite CB-550. Supplied in powder

(Continued on page 122)



**FOR INCREASED EFFICIENCY
IN WAR PRODUCTION PLANTS**

WOOD-SECTION

BARCOL OVERDOORS

**WITH ELECTRIC
DOOR OPERATORS**

Time lost in waiting for a door to be opened or closed is time lost from the war effort. You cannot reduce that lost time to zero, because big doors will not yet open or close *instantly*—but you *can* reduce *wasted* time to a *minimum* by using dependable, durable BARCOL OVERdoors with electric Door Operators that insure efficient handling. There are many places in war production plants where a quick, easy-operating BARCOL OVERdoor will save time and speed operations.

SAVE STEEL. Wood-section BARCOL OVERdoors require a minimum of critical materials and are built to exacting standards for trouble-free performance. For engineering details and specifications to suit *your* needs, consult your Barcol representative.



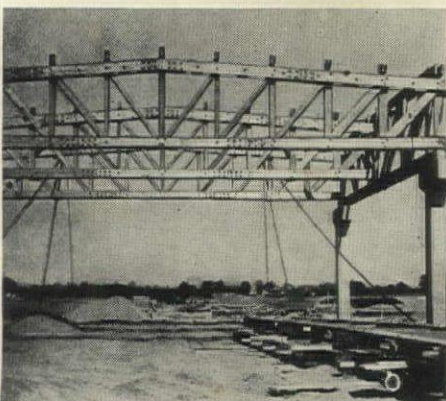
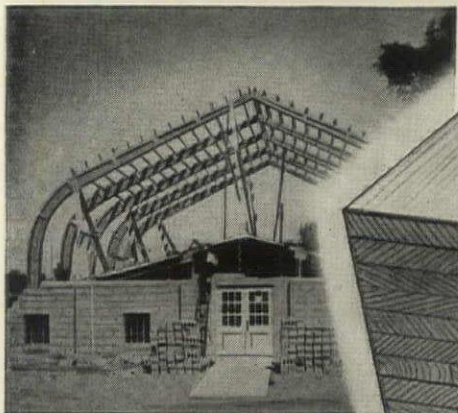
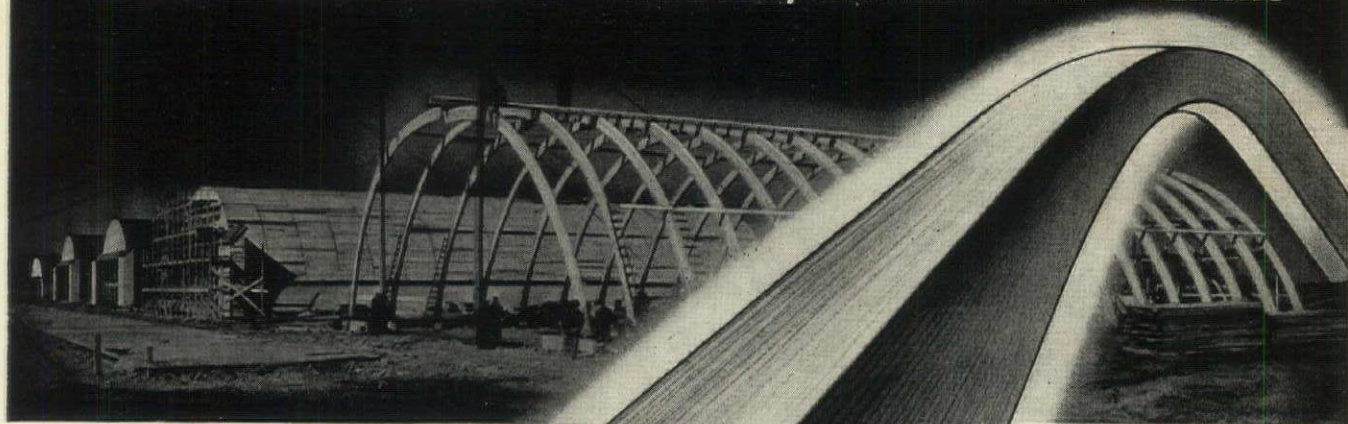
BARBER-COLMAN COMPANY

112 MILL STREET • ROCKFORD, ILLINOIS

SALES, INSTALLATION, AND SERVICE REPRESENTATIVES IN PRINCIPAL CITIES

WOOD and GLUE

FORM TODAY'S ROOF TRUSSES, ARCHES AND BEAMS



RILCO FACTORY FABRICATED LAMINATED PRODUCTS *are available for priority construction*

► Wood and glue are meeting the present rush needs for fast, economical construction. From them Rilco is factory fabricating glued laminated roof arches, trusses and beams for buildings with vast, post-free spans up to 200 feet.

Right now Rilco Laminated Products are being used in the construction of factories, airplane hangars, drill halls, storage buildings, churches, theatres, recreation centers. They are designed and engineered for the specific job—factory fabricated under rigid supervision in five Rilco plants strategically located for prompt service. They are delivered to the job, ready for fast erection.

Whatever the structure, wherever the location, North, South, East or West, Rilco is ready to deliver the size and type of structural framing members required. Complete engineering data and design cooperation is available to architect and engineer. Write today for information on Rilco Laminated Products.

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RILCO

DESIGNERS
AND FABRICATORS OF
ENGINEERED WOOD
PRODUCTS FOR A WIDE
VARIETY OF USES

RILCO LAMINATED PRODUCTS, INC.

A Weyerhaeuser Institution

1594 FIRST NATIONAL BANK BUILDING, SAINT PAUL, MINNESOTA

Factories: ALBERT LEA, MINN., BRODHEAD, WIS., CHICAGO, ILL., HUNTINGTON, IND., WILKES BARRE, PA.

Building Reporter

(Continued from page 120)

form which is easily dispersible in water and requires the addition of no hardeners or setting agents. Though the resin itself is colorless, an inert green dye has been incorporated to facilitate identity, mixing and spreading. Begins to set as soon as water is added. The life of the mix varies with the temperature, being usable for approximately 4 hours, at 75° F., the lowest temperature at which it can be applied. Meets fully the requirements of the new Army-Navy Aeronautical Speci-

fication AN-G-8 as well as earlier Army Specification 14,110 and Navy Department Specification G-29.

Manufacturer: Resinous Products & Chemical Co., 222 Washington Sq., Phila., Pa.

PAINT, dehydrated, weighs about half as much as liquid paint, bulks considerably less.

Name: Dehydray.

Purpose: Developed in accordance with the Government's effort to save vital shipping space.

Features: Claims every advantage found in the new resin-emulsion paints. Has excellent washability. Covers almost any kind of interior wall surface including wallpaper, cement, wallboard, paint, brick

and plaster (usually with only one coat). No water is bought at all — customer uses his own. Packed in cardboard cartons, cannot freeze. Available in 12 standard colors selected by decorator-consultant Virginia Hamill — 12 additional colors may be obtained by intermixing.

Manufacturer: Devoe & Reynolds Co., Inc., 44th St. & First Ave., New York, N. Y.

PAINTS are fortified with wax.

Name: Johnson's Wax Fortified Paints.

Purpose: Interior use.

Features: Paints are impregnated with wax which gives surfaces a special smoothness, greater water-repellency, a better resistance to dirt, wear and scratches, and a retention of maximum light-reflection values. Available in 1-, 5-, and 55-gal. containers—in mill white gloss, mill white flat, interior gloss, interior semi-gloss, interior flat, dado enamel and machine enamel.

Manufacturer: S. C. Johnson & Son, Inc., Racine, Wis.

DEHUMIDIFIER fights dampness, mildew, mold, rust, odors.

Name: Drier-Outer.

Purpose: To absorb excess moisture and odors from the air in confined spaces.

Features: Chemicals used are harmless to touch and to fabrics and materials of all sorts. Supplied in two forms: one is designed to impart a pleasant odor in addition to absorbing moisture, while the other reduces certain odors. Available in two sizes: one takes care of closet space, sells for 69 cents; the other is for basement use, sells for \$2. Packages under normal conditions have a life of 30 days.

Manufacturer: Puritan Chemical Co., Atlanta, Ga.

MAINTENANCE ELEVATOR of telescopic, portable design.

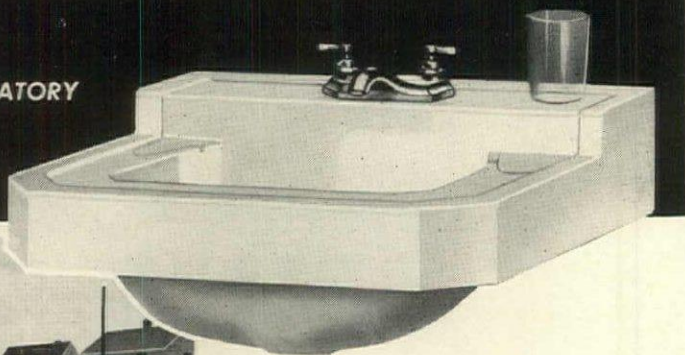


Name: 40 Ft. Telescopic Victory Stacker.

Purpose: For general maintenance work, installation of overhead wiring, lighting fixtures, sprinkler systems, etc.

(Continued on page 124)

SAVOY JR. LAVATORY



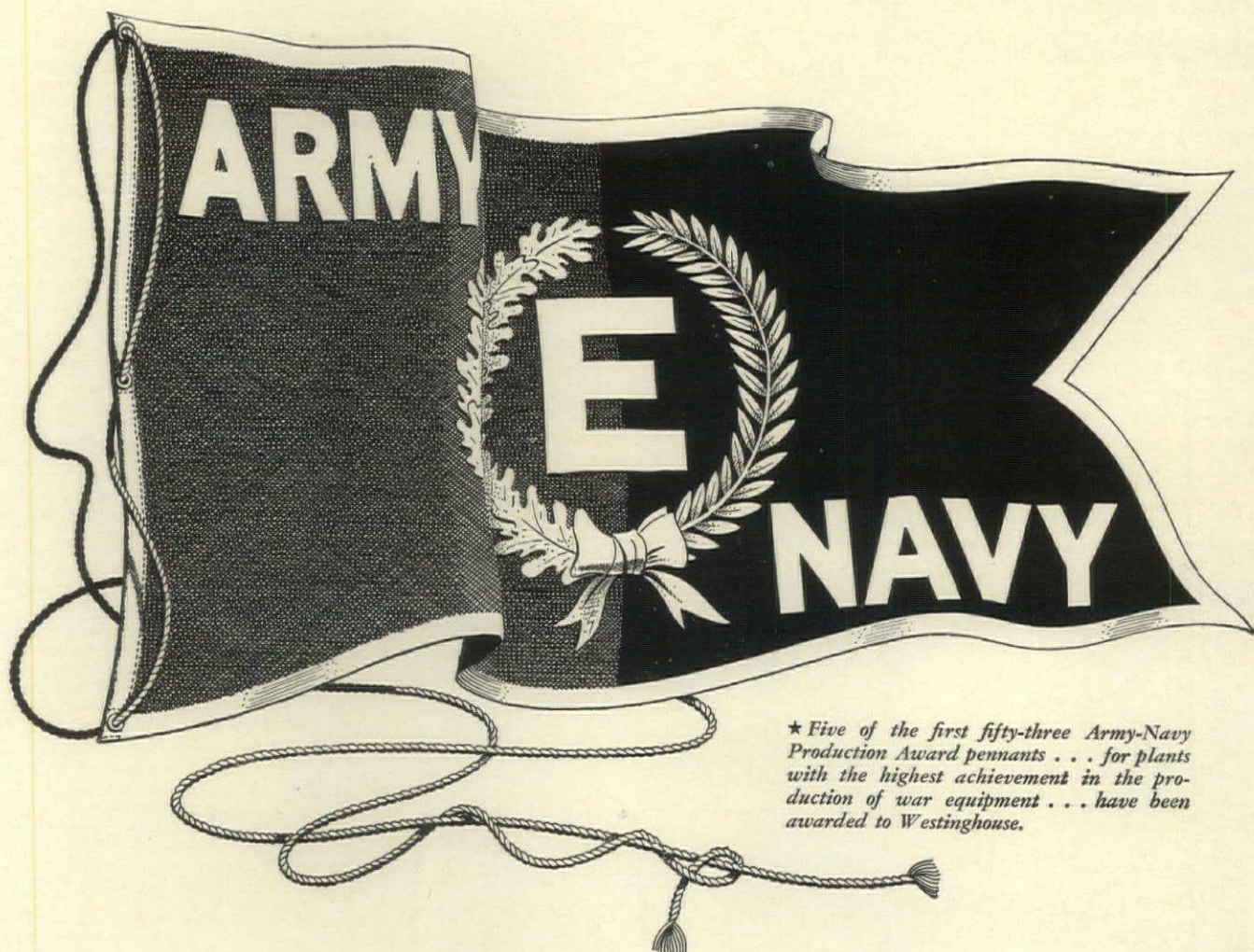
In this PITTSBURGH HOUSING PROJECT... Savoy Jr. Lavatories by **ELJER**

Here are 3 views of another large housing job for which Eljer's Savoy Jr. Lavatory was selected. Modern in appearance, compact, economical and durable, this vitreous china lavatory is getting the call on more and more war housing jobs. See it at Eljer jobbers.

ELJER CO. • FORD CITY, PA.

Write for our Condensed Catalog

THERE ARE OVER 5 MILLION ELJER FIXTURES IN USE



★ Five of the first fifty-three Army-Navy Production Award pennants . . . for plants with the highest achievement in the production of war equipment . . . have been awarded to Westinghouse.

**To Westinghouse men and women,
for "an outstanding contribution to victory"**

IN ANNOUNCING that five of the first fifty-three Army-Navy Production Awards go to Westinghouse, James Forrestal, Undersecretary of the Navy, said, "The men and women in these plants are making an outstanding contribution to victory. Their practical patriotism stands as an example to all Americans and they have reason to be proud of the record they have set."

Westinghouse, one of the world's leading manufacturers of electrical equipment, is now producing war materials at the rate of 4000

carloads per month . . . enough to fill a freight train 37 miles long every 30 days.

To this effort, we are applying the full extent of Westinghouse "know how" in scientific research, in engineering, and in production. As a result, production, on a man-hour basis, is 95% ahead of the mid-1940 rate. In some divisions, production is up more than 300%.

This is the record to date. We hope to make it still better tomorrow.



Westinghouse

Westinghouse Electric and Manufacturing Company,
Pittsburgh, Pa. • Plants in 25 cities—Offices everywhere

Building Reporter

(Continued from page 122)

Features: Stacker can be mounted on a tractor (see illustration) or be made to operate on its own wheels as a conventional stacker in which case the base width would be 7 to 8 ft. It is electrically powered (3 HP, 110 V, DC current), has push button control and slack cable platform locking device. Lifting capacity is 1,500 lbs.; overall height, 40 ft. 4 in.; working platform, 36x72 in. Also available with lower capacities, lower collapsed height and various platform sizes.

Manufacturer: Lewis-Shepard Sales Corp., 245 Walnut St., Watertown, Mass.

GRILLE guards entrances.

Name: Protective Swinging Grille.

Purpose: For barricading doorways without obstructing air, light or vision.

Features: The grille is permanently installed by side hinges. Grille proper is assembled in a heavy steel frame and equipped with steel-encased cylinder lock. The assembly of steel links and 5/16 in. steel rounds affords neat appearance as well as strength. Apertures are small, yet large enough to allow air and light passage. Furnished in any size.

Manufacturer: The Kinnear Mfg. Co., 820 Fields Ave., Columbus, Ohio.

NEW PRODUCT LITERATURE

AIR CONDITIONING. *Air Clean As a Whistle.* Booklet B-3083, 6 pp., 8½x11. The ability of the Precipitron to clean circulating air of 90% of all dirt and dust particles has given it wide application where precision engine parts are manufactured, inspected and assembled. This new booklet describes 7 outstanding applications with illustrations of each. Westinghouse Electric & Mfg. Co., Dept. 7N20, East Pittsburgh, Pa.

ELECTRICAL. *Bulletin 1,000*, 19 pp., 8½x10½, covers fusible service equipment and meter entrance switches. Square D Co., 6060 Rivard St., Detroit, Mich.

FUEL FOR VICTORY. Four new handbooks:

1) *War on Fuel Waste—How to do it.* Folder, 7 pp., 6x9½, presents information to assist the home owner in fuel conservation methods, the procedure for converting oil burner heating plants to coal, and the proper methods of firing coal and other fuels in heating equipment. Mailing charge is 5 cents for a single copy. American Society of Heating and Ventilating Engineers, 51 Madison Ave., New York, N. Y.

2) *Tips on Fuel Conservation*, 37 pp., 4x9, written for all householders regardless of the type of heating equipment they have. Tabbed and indexed for easy reference. Fuel-saving facts are presented in three sections: the first concerns heat loss generally, covering weather-stripping, storm sash, insulation, and other means of reducing heat loss; the second covers heating equipment and heating systems; the third deals with service calls and suggestions on how to avoid unnecessary ones. General Electric Co., Air Conditioning and Commercial Refrigeration Dept., 5 Lawrence St., Bloomfield, N. J.

3) *How to Heat Your Home with Less Fuel This Winter.* Leaflet, 6 pp., 3½x8, shows householders how they can cut their heating requirements. Also lists additional U. S. Government bulletins that may be procured on this subject. National Mineral Wool Assn., 1270 Sixth Ave., New York, N. Y.

4) *How To Save Fuel Oil*, 28 pp., 6½x10, contains 52 ways of conserving fuel and heat. Many of the suggestions apply to heat conservation regardless of type of fuel used, and if followed will result in an aggregate saving of tremendous proportions. Petroleum Industry Committee, 624 South Michigan Ave., Chicago, Ill.

MECHANICAL EQUIPMENT. Three new booklets:

1) *Texrope V-Belt Drives*, Bulletin B6051-C, 11 pp., 8½x11, reduces a wealth of engineering information to simplified charts and tables for quick selection of important V-belt power transmission units. Also gives list prices, stock sizes, dimensions and construction details.

2) *Lo-Maintenance Motors*, Bulletin B6052-C, 11 pp., 8½x11, designed to give all facts necessary for quickly choosing correct motors. Includes compact, simplified charts, construction features, illustrations of typical applications, dimension ratings, price lists, speed-torque curves and discussions of several engineering phases of motor application, such as the recommended use of higher speed motors and adjustable speed. For each design and application relationship, rating, duty, torques, starting current, efficiency and slip are indicated—for squirrel-cage, wound rotor, direct current and synchronous motors.

3) *Centrifugal Pumps*, Bulletin B6059-H, 7 pp., 8½x11, sets forth construction features, sizes and capacities of pumps for every purpose—single and double suction, single and multi-stage, mixed and axial flow, combined units and pumps to solve special problems. Concise descriptions, charts and diagrams. Allis-Chalmers Mfg. Co., 1126 South 70th St., Milwaukee, Wis.

MODERNIZATION. *A Wartime Guide to Better Homes.* Manual, 24 pp., 8½x11. Timely discussion of the construction work that can be done under present WPB regulations. Neat, attractive format. The Celotex Corp., 120 South LaSalle St., Chicago, Ill.

POWER PLANT EQUIPMENT. *Catalog No. 142*, 21 pp., 8½x11. Contains technical data on such Williams specialties as pump valves, water gauges, steam pump governors, gauge cocks, ball-type, high-pressure steam traps, safety feed water regulators, high and low alarm columns, flanged silent check valves and standard feed regulators. Profusely illustrated. The Williams Gauge Co., 2010 Pennsylvania Ave., N. S. Pittsburgh, Pa.

STEAM GENERATOR. *Instant-Steam.* Bound loose-leaf file, 21 pp., 9x11¼, contains data on "Packaged Steam" generators, several types of valves, traps, metallic joints, thermostatic controls, motorized valve and damper, heat exchanger, command alarm, stratomotor and thermobalancer. Vapor Car Heating Co., Inc., 80 East Jackson Blvd., Chicago, Ill.



What Then— Are The Advantages of Radiant Heat?

FIRST of all, it travels in straight lines, at right angles in every direction from the radiator.

Second, these radiant rays are not in the least affected by drafts. Any movement of air cannot change its direction, any more than does the wind blow the sun's heat about.

It, like the sun's heat, does not warm the air thru which it passes, but by reflection from what it strikes.

Because of its straight right angle di-

rection, the floors and walls of the room are quickly heated and in turn give off heat.

The general air is at the same time being heated by the convected heat from the same radiator. **Two heats**, teamed up to give a quick, uniform heating and an assurance of the floors being draft-free and comfortable.

Only heat from radiators has *both* the convected and radiant heating.

See Sweet's. See For Yourself

Burnham Boiler Corporation

Irvington, N. Y.
Dept. J

Zanesville, Ohio
Dept. J

Representatives In All Principal Cities of the United States and Canada

For
**WAR
HOUSING!**



**Use the flooring that
is ideal for fast,
low-cost construction!**

SPEED is the keynote of war housing today. That's why factory-finished Streamline Hardwood Flooring is the first choice of contractors for large and small projects all over the nation. Completely finished at the factory with the amazing "Bruce-Way" Finish, Streamline Flooring is ready to use as soon as it's laid. In addition to saving valuable days on the job, Streamline produces a floor superior in appearance and durability. Yet—it costs less than any comparable floor. It's the greatest improvement ever made in hardwood flooring! Write for details.



FOR NEW CONSTRUCTION
FOR REPAIR WORK
FOR REMODELING

E. L. BRUCE CO., Memphis, Tenn.



**BUILDERS
ARCHITECTS
CONTRACTORS**

**The New
SAL-MO
Non-Metallic SUPPLY DUCT
Will Help Solve Your
Metal Shortage Problems**

This new, non-metallic conduit saves metal in constructing supply and return duct lines of warm air heating, air conditioning and ventilating systems. It permits many installations that would otherwise be impossible because of the shortage in critical metals.

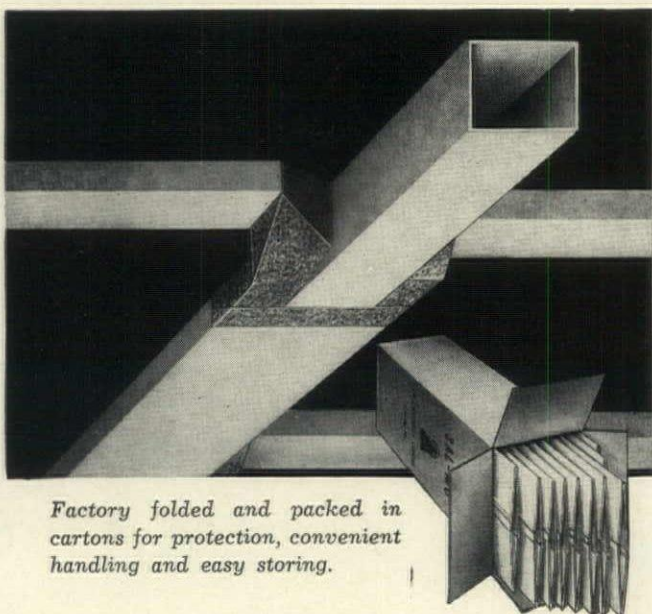
Sal-Mo Supply Duct assures a safe, insulated, fuel-saving duct system. It has been checked by leading independent laboratories and proved to possess a wide margin of safety.

Factory fabricated and packaged in cartons, there is no waste space in shipping and storing. It is most economical and convenient to handle.

S S D in sheets (Sal-Mo Supply Duct) is also available in flat sheets for the fabrication of ducts in your shop or on the job.

NO SHORTAGE—Sal-Mo Supply Duct is available in any quantity and in a complete range of sizes for domestic and industrial requirements.

**INVESTIGATE THIS NEW DUCT MATERIAL—SEE
YOUR JOBBER AT ONCE OR WRITE US.**



Factory folded and packed in cartons for protection, convenient handling and easy storing.

SALL MOUNTAIN COMPANY
176 W. Adams St., DEPT. E. CHICAGO, ILL.

If Bombs come **... SOME ROOFS**

What happens to roofs (and siding) where bombs may fall will depend upon the *stuff* of which they're built.

Some roofs will be "blown to dust." They'll be shattered so completely that total replacement will be required.

But some roofs and siding will *take it* to a remarkable degree.

In England, they know which is which. And they are doing something about it. Because bombing has taught its lessons, they're building all the roofs they can of Robertson Protected Metal (RPM). They have found the roof that will meet bomb action and minimize damage.

Any roof that can withstand first, the pressure waves, and then, the suction waves of high explosives is truly a *robust roof*. Because RPM has the ability to "give" or literally "breathe" and return to its original position, it withstands bombing in a remarkable way. Consequently, the damaged areas of RPM roofing and siding are relatively restricted . . . and quick repairs can be made.

Resistance to bombing is a "plus" that came with the war. RPM has *always* provided resistance to corrosion, fumes, chemicals and moist salt air . . . always had phenomenal endurance under exposure to tropical heat and bitter cold . . . reasons for its world-wide use.

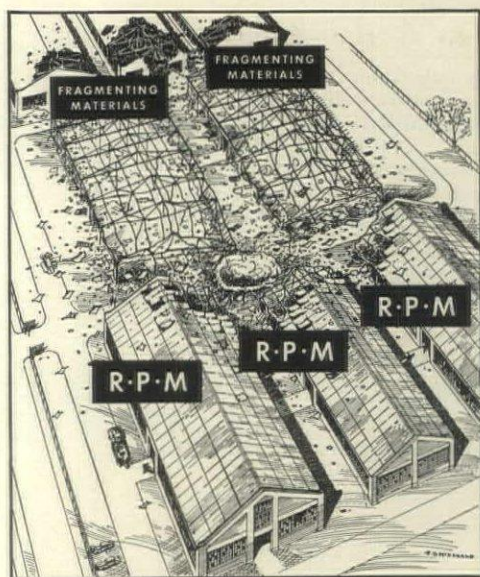
And what's more, it's a "quick" roof. That's because we do most of the work at the factory and less on the job. The walls and roofs of your buildings are 77% complete when prefabricated RPM arrives on the site. And we get it there quick.

What we really make is time.

H. H. ROBERTSON COMPANY
FARMERS BANK BUILDING • PITTSBURGH, PA.

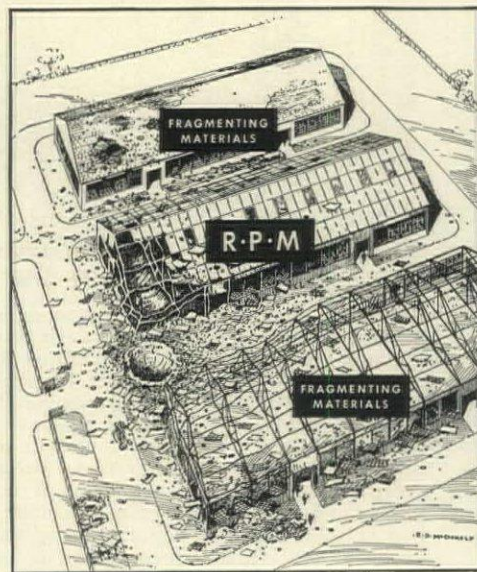
ROBERTSON PROTECTED

WILL RECUPERATE QUICKLY



CASE No. 4 (Left)—A high explosive bomb was dropped on this English plant (name deleted) at the point indicated. Damage to RPM roofing was confined to areas near explosion. Fragmenting materials were completely stripped from two center buildings, and from portions of buildings in background.

CASE No. 6 (Right)—This case of another English plant offers further direct and significant comparison between the effects of bomb concussions on RPM and fragmenting materials. The building with fragmenting materials in the foreground and the RPM building were equally exposed to the bomb concussion, but with totally different results. Note that the fragmenting roof on the building in the background also is damaged, although some distance from the explosion.



METAL



H. H. Robertson Co., Farmers Bank Building, Pittsburgh, Pa.

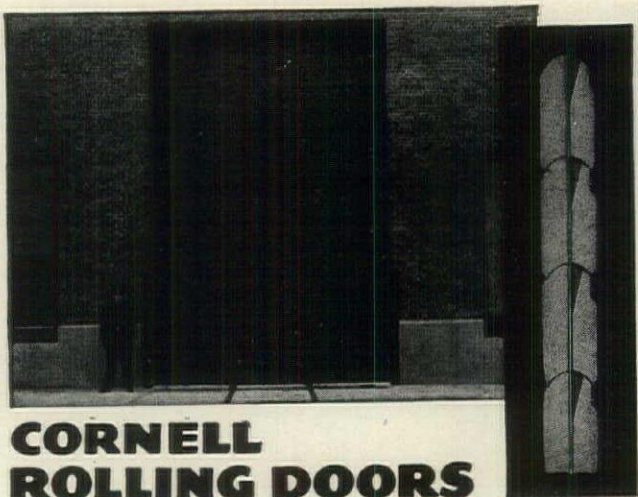
- ☐ Please send me copy of your new book, "Quick is the Word".
☐ Please have a Robertson Engineer submit new portfolio covering your Bombing Story.

Name

Firm

Address

City State



CORNELL ROLLING DOORS IN WOOD

WPB order L-142 limiting use of steel doors, places the tested CORNELL WOOD ROLLING DOORS in the forefront to conserve critical war-time materials. Retain the important rolling door economy of floor space, side wall and ceiling space.

Section thru wood-slat curtain. Note how the design sheds weather.

Cornell Wood Rolling Doors consist of interlocking wood slats, strung on metal bands placed 2' to 3' apart, and operating in plywood guides, with light formed-plywood hood covering the coil. Weather-protected. Can be motor operated.

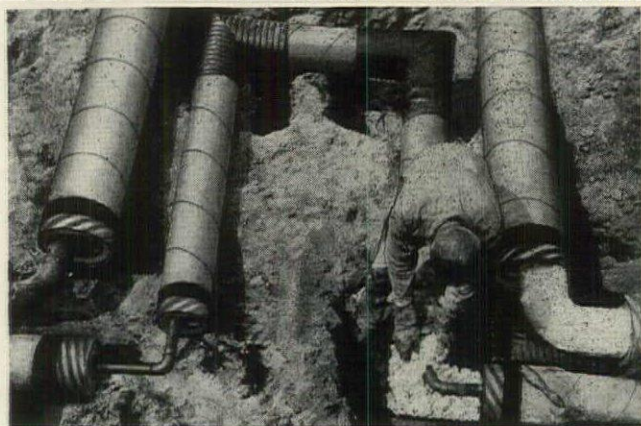
Also ask about
Cornell WOOD
Vertical-lift doors,
Canopy and Bi-fold
doors.

CORNELL IRON WORKS, Inc.
36TH AVE. & 13TH STREET LONG ISLAND CITY, N. Y.

SINCE 1828

Send for complete details, specifications on Cornell Doors and Grilles. Ask for Catalog X.

RIC-WIL INSULATED PIPE UNITS — PRE-FABRICATED



— for top **SPEED** on the Job!

Ric-wil Underground Piping Systems cut installation time to the bone! In Ric-wil's large modern plant at Barberton, Ohio, are unique facilities for the streamlined production of unit piping systems for underground or outside overhead steam, hot water or oil lines. These units (in approximately 20 foot lengths) are totally factory pre-fabricated and delivered to the job ready for quick and economical installation. Note in cut above how every construction detail is engineered and built-in. Also, all necessary accessories—expansion loops, conduit fittings, anchors, water-tight glands, etc.—are factory pre-built to your specifications and shipped ready to install, saving not only field labor and expense, but valuable time, which is not lost in waiting for missing parts. Send for Bulletin 4208.

Engineers on Defense Projects ONLY! Write on your letterhead for Engineering Manual 420A.

RIC-WIL CONDUIT SYSTEMS
THE RIC-WIL CO., CLEVELAND, O.
Agents in Principal Cities



**Automatic
CONCRETE CURING**

... Saves Money
and Manpower

The SISALKRAFT method of concrete curing is simple, positive, economical. Cover the freshly finished slab with tough, waterproof SISALKRAFT . . . and forget it until curing is completed. No sprinkling or flooding — no sand or straw. SISALKRAFT is quickly applied by only two men. It can usually be re-used many times, cutting curing costs to rock bottom.

Write for complete data, specification and sample.

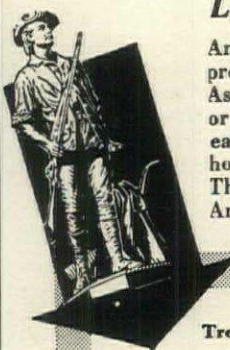
The SISALKRAFT Co., 205 W. Wacker Drive, Chicago, Ill.
NEW YORK SAN FRANCISCO



voluntary } helps workers provide for the future
pay-roll }
allotment } helps build future buying power
plan } helps defend America today

Let's do it the American way!

America's talent for working out emergency problems, democratically, is being tested today. As always, we will work it out, without pressure or coercion . . . in that old American way; each businessman strengthening his own house; not waiting for his neighbor to do it. That custom has, throughout history, enabled America to get things done of its own free will.



FREE - NO OBLIGATION

Treasury Department, Section A,
709 Twelfth St. NW., Washington, D. C.

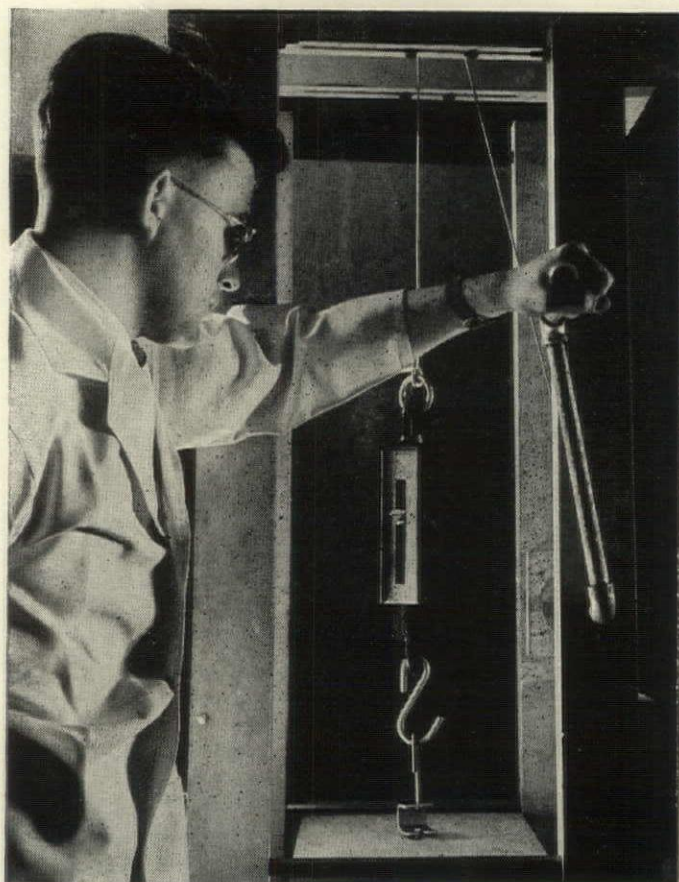
Please send me the free kit of material being used by companies that have installed the Voluntary Defense Savings Pay-Roll Allotment Plan.

Name _____

Position _____

Company _____

Address _____



He pulls nails out of Plywood so you'll know more about driving them in!

• The nails you use with Douglas Fir Plywood in the future may be unlike the nails you have regularly called for up to now. *First* because war-time restrictions to save metal may have a lasting influence on nail sizes and weights. *Second* because the nail-holding tests now being conducted as part of the Douglas Fir Plywood Association's intensified research program may prove that under various conditions shorter or lighter nails—or nails or fasteners of different designs—are more efficient than those previously specified.

Of course the *complete* answer to this new nailing problem—and to scores of others—has not yet been determined. But by the time Douglas Fir Plywood is again generally available, our research men will be able to tell you how to use it to far better advantage than ever before. Douglas Fir Plywood Association, Tacoma, Washington.

**TO HELP SPEED
VICTORY**
the Douglas Fir
Plywood Industry
is devoting its en-
tire capacity to
war production.
We know this pro-
gram has your
approval.

REMEMBER—there's a grade or type of Douglas Fir Plywood for every purpose. A genuine panel bears one of these "grade trade-marks":

EXT-DFPA—waterproof type
PLYWALL—wallboard grade
PLYSCORD—sheathing grade
PLYANEL—cabinet grade
PLYFORM—concrete form grade

DOUGLAS FIR PLYWOOD

Real Lumber
**MADE LARGER, LIGHTER
SPLIT-PROOF
STRONGER**

"A PRODUCT OF AMERICA'S ETERNALLY REPLENISHING FORESTS"

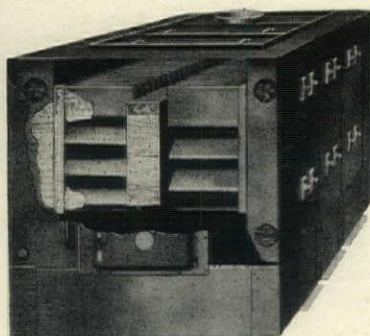
Mr. B. Smart Says:



THE KOVEN SECTIONAL
BOILER CAN BE TAKEN
THROUGH A 2-FT. DOOR
ELIMINATING EXPENSIVE
BUILDING ALTERATIONS
AND
RIGGING COSTS

2 FEET

THIS SECTIONAL
SERIES IS THE IDEAL
CHOICE FOR APARTMENT
HOUSE AND INDUSTRIAL
INSTALLATIONS



OTHER KOVEN WATERFILM SECTIONAL SERIES FEATURE:

QUICK HEAT — due to the
KOVEN WATERFILM'S Patented
Construction which cannot be
duplicated by any other boiler.

ECONOMICAL OPERATION —
due to Fast Steaming Leadership.

RUGGED CONSTRUCTION —
built by KOVEN, one of the finest
fabricators in the East.

**IDEAL FOR AUTOMATIC FIR-
ING** with Oil, Stoker, or Gas.

**DON'T FORGET
...IF YOU NEED
INCREASED
HEATING-
CAPACITY
ALL YOU HAVE
TO DO IS ADD
NEW SECTIONS
TO THIS
BOILER**



KOVEN WATERFILM BOILERS are made in models to suit all other heating requirements — the De Luxe Model for the Better Grade House, the one piece model for larger Installations and the Model "O" for the Small Home.

Write or phone today for complete details concerning KOVEN WATERFILM BOILERS.

WATERFILM BOILERS, INC.

154 OGDEN AVENUE, JERSEY CITY, N. J.

PLANTS: Jersey City, N. J. and Dover, N. J.



The bonds a well-built house pays for

The Turner's bank would be the best place to buy U.S. War Bonds on Lin Street. It is the best place to buy them.

...just prove to Mr. Turner that copper and brass are the best materials for building a house. From the Metal in the walls to the Metal in the roof, they will make a house that will last for ever.



Quartermaster to the American Home

How wonderful is the part played by copper and brass in the American home. They are the backbone of the home, the backbone of the nation. They are the backbone of the world.



Lucky Mrs. Wilson...especially on Mondays

Mrs. Wilson has been blessed the day they bought this water heater. It is the best thing she has ever had. It is the best thing she has ever had.



Anaconda Copper & Brass



Hats off to these unsung guardians of your health

Copper and brass are needed to help us win this war. They are the backbone of the nation. They are the backbone of the world.

Copper & Brass

A Contribution

The desire for comfortable and gracious living... so ably satisfied by you... has not dissolved in the crucible of war. It is being kept alive by such messages as you see here. Reminded that copper and brass are vital to victory, Americans also are reminded of the economies and comforts these metals can bring them



Anaconda

Meet
America's only
5-star General

ANACONDA

ANACONDA

...THIS ADVERTISEMENT APPEARS IN TIME CIRCULATION 490,630; DATED 17 AUGUST 1974



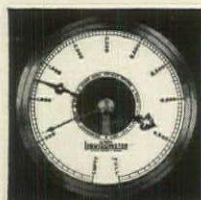
4250

• Trade Mark Reg. U.S. Pat. Off.

In Canada: Anaconda American Brass, Ltd., New Toronto, Ont.

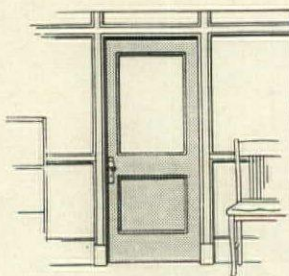
5 Reasons Why We Measure Our Valuable Stored Liquids With **LIQUIDOMETER** Tank Gauges "THEY'RE ALWAYS DEPENDABLE"

- 1 100% automatic.
- 2 No pumps, valves, or auxiliary units needed to read them.
- 3 Models available so that readings can be taken remotely from or directly at the tank.
- 4 Accuracy unaffected by specific gravity of tank liquid.
- 5 Approved for gauging hazardous liquids by Underwriters' Laboratories and other similar groups.



Write for complete details

THE **LIQUIDOMETER** CORP.
36-30 SKILLMAN AVE., LONG ISLAND CITY, N.Y.



IN A SMALL BUT IMPRESSIVE CORNER OF OUR PLANT . .

There's a door that leads to a brighter world, where products of peacetime take new shapes in blueprint and metal—prophesying of days to come.

Beyond this room a plant shrieks of full-time war production.

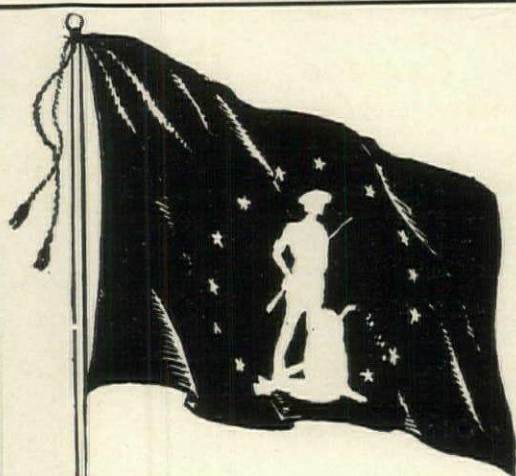
Out of it all will come—precision manufacture hitherto unreached—new ways of making finer, better products at lower costs.

There will be three Victories at Victor—we promise.

VICTOR ELECTRIC PRODUCTS, INC.

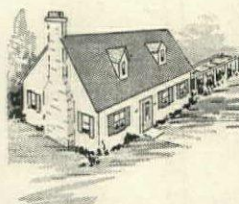
Dept. 1B-111, Cincinnati, Ohio

FANS • VENTILATORS • MOTORS • ????



For Victory today . . . and prosperity tomorrow, keep the War Bond Pay-roll Savings Plan rolling in your firm. Get that flag flying now! Your State War Savings Staff Administrator will gladly explain how you may do so.

If your firm has not already installed the Pay-roll Savings Plan, now is the time to do so. For full details, plus samples of result-getting literature and promotional helps, write or wire: War Savings Staff, Section F, Treasury Department, 709 Twelfth Street NW., Washington, D. C.



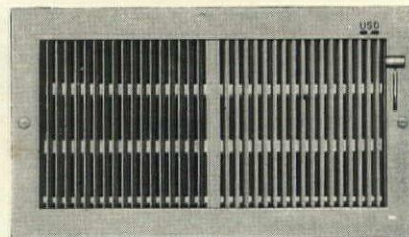
REGISTERS for SMALL HOMES

and GROUP HOUSING

With the widespread use of simplified heating systems, often stripped to the bare essentials, small homes and housing projects need the added efficiency of Auer Registers. There are many Auer warm-air models suited to low-cost house requirements, such as the Airo-Flex "4000" Series shown here. This is a Multiple louvre register with directional fins, adjustable with turning tool. If you are equipping small home jobs, it will pay you to know about the Auer line.

Write for Auer Register Book showing all models for warm air and air conditioning. Separate Catalog "G" also available on flat metal grilles.

The Auer Register Co.
Cleveland, Ohio



Airo-Flex 4432 Multiple Louvre Adjustable Register

AUER REGISTERS
& GRILLES For Air Conditioning and Gravity

Rollins College

WINTER PARK, FLORIDA

The walls and ceilings of Strong Hall (illustrated here), the Students' Recreation Building and the Art Museum were made enduringly beautiful with the *original* Ohio White Finish.

Kiehnel & Elliott, Miami, were the architects;

H. C. Cone, Winter Park, the general contractor;

J. O. Youtsey, Orlando, plastering contractor.



The *original* is always packed in bags distinctively marked with Red Zig Zag Stripes.

Thousands of our finest institutional buildings—hospitals, churches, schools, libraries, auditoriums, etc.,—have interior finishes made enduringly beautiful with *original* Ohio White Finish. That is because an ever increasing number of architects, plastering contractors and dealers know, from experience, that the high quality of this finishing line is *dependable*—that it's always *fresh*, works *cool*, spreads *far*.

THE OHIO HYDRATE & SUPPLY CO.

Woodville, Ohio

...QUARTER-CENTURY *Prefabricating experience*

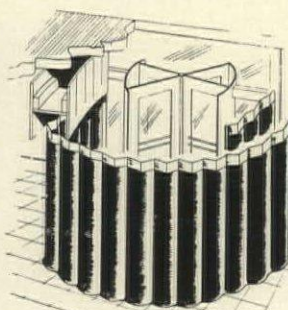


10,000
of these in
25 YEARS

Here is a typical illustration of the industrial house we have built for Southern industry for more than twenty-five years. Durable, and attractive, 95% of it may be salvaged.

- Our large, completely equipped plant is now available for all types of wood fabrication. Inquiries are invited.

HOUSTON Ready-Cut HOUSE CO.
25 years Prefabricating Houses
POLK AVENUE HOUSTON, TEXAS



WHEN THERE'S AN
ENTRANCE THROUGH
WHICH *No* LIGHT
MUST ESCAPE

War-time precautions demand adequate provision for blackout of entrances.

New Castle's new Folding Fabric Blackout Partitions effectively meet this problem. Unusual flexibility is assured by the use of an accordion-like principle so effectively employed in Modernfold Doors. New Castle Blackout Partitions comply with blackout standards, yet make it possible to enter and leave lighted buildings.

When not in use, the partitions can be folded to the wall and no valuable space is consumed or lost such as is required by a permanently constructed lightlock. The above is only one application of New Castle Blackout Partitions. They can be made to meet various problems of location and door arrangement. Write for full details today.

MODERNFOLD DOORS

Modernfold Doors have assured exceptional beauty and utility in hundreds of home and commercial installations. The precision-built, accordion-like metal frame insures strength comparable to a solid door. They are finished with fabrics of various colors. Send for full information.

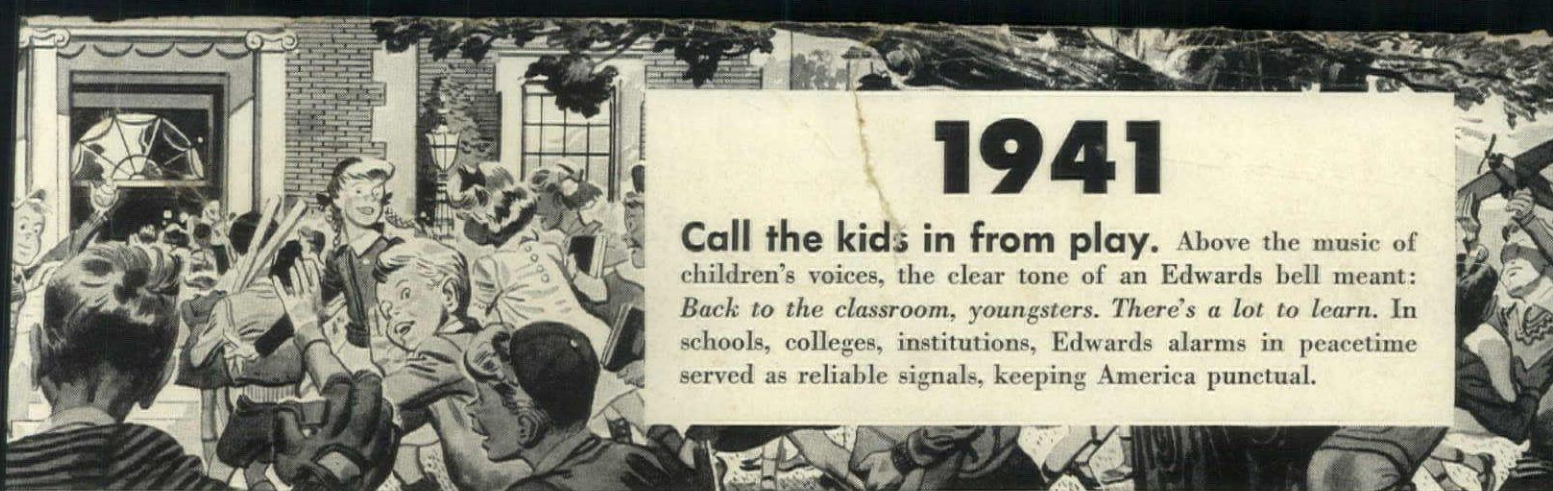


NEW CASTLE PRODUCTS
1613 I Street New Castle, Indiana
424 Madison Avenue MODERNFOLD DOORS
New York City, N. Y.

SPECIFICATION AND BUYING INDEX

The advertising pages of THE ARCHITECTURAL FORUM are the recognized market place for architects and all others engaged in building. A house or any other building could be built completely of products advertised in THE FORUM. While it is not possible to certify building products, it is possible to open these pages only to those manufacturers whose reputation merits confidence. This THE FORUM does.

Aluminum Company of America	25	Lead Industries Association	7
American Brass Company, The	130, 131	Libbey-Owens-Ford Glass Company	31
American Lumber & Treating Co.	100	Liquidometer Corp., The	132
American Rolling Mill Company, The ..	97	Lord and Burnham Company	118
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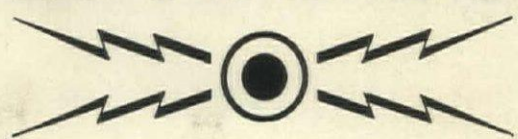
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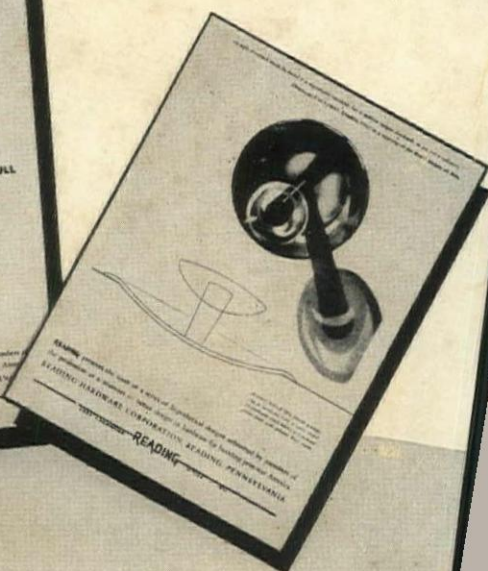
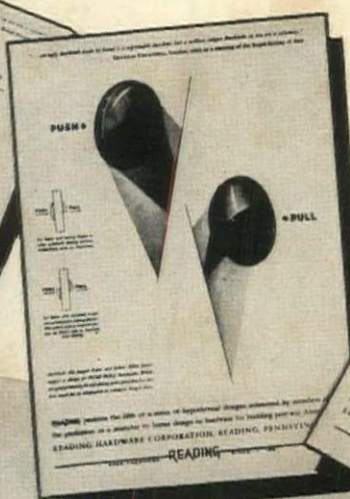
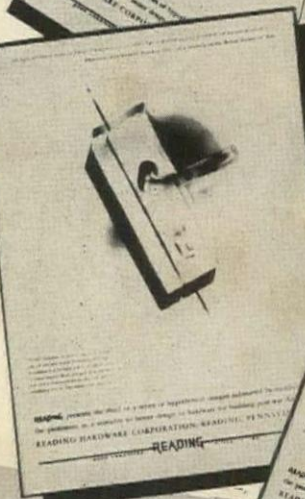
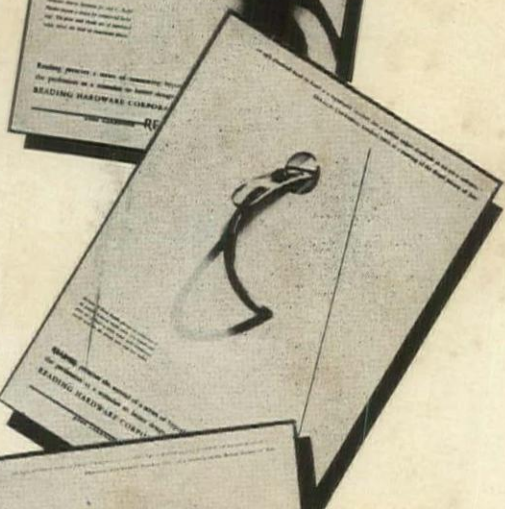
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